No 252

Supreme Court of the United States.

OCTOBER TERM, 1882.

THE WILSON PACKING COMPANY — ARTHUR A. LIBBY, ARCHIBALD McNEIL AND CHARLES P. LIBBY, *Appellants*,

vs.

THE CHICAGO PACKING AND PROVISION CO., *Appellees.*

Appeal from Circuit Court for Northern District of Illinois.

SAME,

vs.

ROBERT D. HUNTER ET AL.,

Appeal from Circuit Court for Southern District of Illinois.

SAME,

vs.

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Appeal from Circuit Court for Southern District of Illinois.

STATEMENT, POINTS AND ARGUMENT FOR APPELLEES.

NOBLE & ORRICK,
Solicitors for Defendants.

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STATEMENT, POINTS AND ARGUMENT OF NOBLE & ORRICK FOR APPELLEES.

We shall treat the three cases as one; the issues, indeed, being the same; only the first case against Hunter, and that against the Chicago company involve the process of preserv-

ing, and the product of, boiled beef, compressed; and the second case against Hunter involves the novelty of the can chiefly.

Our statement is more particularly in regard to the cases against Hunter and others, wherein we are solicitors.

The original bill was filed June 16, 1877, and the amended bill October 27, 1877.

There was a plea to the jurisdiction by the St. Louis Beef Canning Company, filed November 5th, 1877, based on the proposition that the defendant was not subject to process within the Southern District of Illinois; but this plea was held bad for insufficiency. The point is in the record, but will not be here discussed.

So much of the answer as sets up a misjoinder of the parties complainant was subsequently waived by stipulation, and is not now, of course, insisted on.

The answer of Hunter & Merrill was filed February 2, 1878. Newman was never served, nor has he appeared. The answer of the St. Louis Beef Canning Company was filed March 5, 1878, and the general replication March 13, 1878. There was a supplemental answer filed May 5, 1879, and an amendment, by stipulation. (See vol. i, pp. 50, 51).

By the bill the complainants assert the re-issued patent dated April 6, 1875, to the Wilson Packing Company, assignee of Wm. J. Wilson, whose original patent was dated March 31, 1874; and also the re-issued patent dated May 25, 1875, to Arthur A. Libby, assignee of Wm. C. Marshall, whose original patent was dated July 12, 1864; that complainants were interested therein sufficiently to maintain the suit, and that defendants have infringed same. The St. Louis Beef Canning Company's answer denied the interest of the complainants as averred, and asserted there was a misjoinder. It also averred the re-issue to the Wilson Packing Co. was not for same invention as original letters to Wilson, and were therefore void. The same averment is made as to the re-issue to Libby on the Marshall patent. The answer, at same time, denies the original letters of either Wilson or Marshall were for any real invention. It then avers the supposed improvements were well known to the people at large and practiced

before said letters were granted. The answer also positively denies any infringement by defendants.

It is then affirmatively averred by the answer that neither Wilson or Marshall was the original or first inventor as claimed as to the respective patents, and that said supposed process or patented improvement was, long before said patents, well known and in common use in the Unitsd States, Canada, Great Britain, France, Germany, Australia, and elsewhere; and the state of the art was such throughout the United States and Europe, that said pretended improvements were of common knowledge and in daily use among manufacturers, packers, and in the housholds of the people; that said pretended improvements and processes had been described in public works, in specifications of patents, and were the same for which certain patents had been granted in England and the United States.

(Lists of all which printed publications, specifications and patents are given in the answer.)

That the process and pretended improvements were prior to either Wilson or Marshall's letters, known to persons (named), who practiced the same at places (named), as can be proven by witnesses (named), and to persons unknown, who may be brought in and named in supplemental answer.

The supplemental answer extends the lists of publications and persons to whom said processes were known and by whom practiced; and avers that said supposed improvements were in use and on sale in this country for more than two years anterior to application for said original patents by patentees, and with their consent.

The stipulated amendment to the answer further sets forth that the specified Wilson process *was useless and inoperative, and if practiced would result in rapid putrefaction, and therefore was void:* and that the Marshall description of process, on re-issue, was unintelligible to one schooled in the art, and therefore void.

This portion of the answer has never been waived, and is here insisted on.

The replication is general.

Taking these patents in their order, and comparing the original with the re-issued patents, we find the original Wilson patent was for a *process* (defendants' book, p. 134) by which the meat was first cooked at 212°, so that bone and gristle can be removed and the meat yet retain its natural *grain* and integrity. A measured quantity of this cooked meat, yet warm, is pressed by apparatus into a prepared box or case, with sufficient force to remove the air and superfluous moisture and make the meat form a solid cake. The box or case is then closed air-tight upon the meat.

The claim is, first, the process; second, a new article of merchandise, cooked meat, put up in solid form in its natural state, without disintegration or desiccation, in hermetically-sealed packages, as set forth.

The re-issued patent (defendants' book, p. 136) describes the nature of the invention the same as the original, except the words in the original "while heated with cooking" are omitted from the re-issue. And the process is described the same, except where the original says "while yet warm with cooking," the meat is to be pressed, etc. The re-issue says, "preferably, while yet warm with cooking."

In the first portion of the claim of re-issue, the words "while heated with cooking" are omitted; in all other words it is the same as the original. The second portion of the claim in the re-issue is identical with the original.

The original and re-issue of Wilson's patent therefore are the same, except the re-issue permits the meat to be packed cold, if preferred, while the original required that it should be packed warm with cooking.

There is nothing in either patent as to boiling; nor as to the meat being corned, or other than plain meat.

But on October 13, 1880 (p. 920), the patentees executed a disclaimer and filed the same with Commissioner of Patents October 26, 1880, disclaiming the word "preferably," and also any process described to be for meat compressed into the packages in any other condition than a warm or heated condition. (See p. 916, complainants' testimony.)

On October 14, the same patentees executed another disclaimer, filed October 26, disclaiming any interpretation or legal construction to the words "the meat is first cooked thoroughly at a temperature of 212° Fahr.," etc., broader than is conveyed by the words "the meat is first cooked thoroughly *by boiling* it in water so that the meat yet retains its natural grain and integrity." The claim is thus adjusted by the disclaimer to this construction of *boiling* as a limitation upon the process of cooking.

The effect of the two disclaimers throws the patentees back to a process of packing meat cooked by *boiling*, while yet warm with cooking, into air-tight packages; and a new article of merchandise, meat cooked *by boiling*, put up while heated with cooking, in solid form, in its natural state, without disintegration or desiccation, in hermetically-sealed packages, as set forth.

The disclaimers themselves seek evidently to enlarge the second part of the *claim* of the patent, but of course disclaimers cannot be perverted into claims.

These disclaimers were put in after the defendant's testimony-in-chief had been taken, and, we may presume, were forced by the weight of the testimony adduced against the patent as filed with and set forth in the bill.

In a word, the process of the re-issue is abandoned; the only expansion made in it being now disclaimed, and the process of the original patent is modified from cooked meat to meat cooked by boiling.

The disclaimers say, in the language of the statute, that the expansion in the re-issue was through inadvertence, accident or mistake. This is a self-contradicted statement, for the whole re-issue was based on the matters afterwards disclaimed by the first disclaimer, which matters the court is

bound to presume were first claimed and insisted on as a right, and not through inadvertence, accident or mistake.

We pass this for the present, to continue our comparison next between the original and re-issue of the Marshall patent.

The Marshall patent was abandoned at the hearing below; but a statement of its nature as compared with that of Wilson's is material to show the history and development of the Wilson pretension.

The original, vol. i, p. 128, states the nature of the Marshall improvement to be exposing the meat to heavy pressure by means of a press-box, expelling nearly all the water not chemically combined with the meat, and a large quantity of the air between the pieces and in the pores, before the meat is put up in the packages; introducing the meat from the press-box into the package to be filled, without exposing the package to any undue strain. The meat is prepared by first rendering the water of the meat temporarily proof against putrefaction by any of the ordinary processes, and said water being the *only* destroying agent, a large percentage is removed and the remainder fixed by concentrated antiseptics; a given quantity of meat is then subjected to pressure in a box or cylinder until all air is driven out and the space occupied by the meat agrees with the size of a package it is intended to fill. When the meat is in its place the box is hermetically sealed, and in this state, retaining all its nutritive qualities, the meat will remain perfect as long as the package remains intact.

The claim is:

1st. Exposing meat, previous to putting in package, to a heavy pressure.

2d. The press-box.

3d. A frame, etc.

The re-issue describes the nature of the improvement in substance the same as the original (see p. 132, vol. ii), and by the specification of the process, is modified, first, by declaring water the *chief* agent in destruction; then by stating a given quantity of meat is *subject to pressure* in a suitable mold, "*and subsequently into the packages* or boxes intended to contain the same." It then adds the words, "the air re-

maining in the same being expelled by the usual process in canning," to the words "when the meat is in its place the box is hermetically sealed;" so that besides being hermetically sealed, as in the original, the description of the re-issue requires "the air remaining in the same be expelled by the usual process in canning."

The claim of the re-issue is, first, the process; second, a new article of manufacture; the above-described compressed meat preserved in solid form, without disintegration or desiccation, in hermetically-sealed packages, substantially as herein set forth.

This re-issue is dated nearly eleven years after the original.

There is no cooking of the meat mentioned in the original, and none in the re-issue, unless it is to be inferred from the words, "usual process in canning." There is in neither orignal or re-issue any suggestion of cooking before placing in the can.

The re-issue contains two new elements; in the process, one pressure in the can as well as the mold, until the air is driven out, and the other expelling the remaining air by usual process in canning. Thus the claim of the re-issue is expanded; the original stopped with the heavy pressure *previous* to putting the meat up in packages. (Vol. ii, p. 131).

In a word, the pressure previous to packing is not insisted on, and the usual process in canning is expressly included in the re-issue.

It suggests itself at once, and we mention it in passing, that either the re-issue is void for being for a different invention from that contained in the original patent, or is impracticable because the canning process will destroy the compressed solid form of meat, raw when packed, or the product being still compressed and solid after canning, and necessarily cooked while canning, is the actual product of the Wilson patent, and antedates it.

But we proceed to the last of the patents asserted, that of John A. Wilson. Improvement in sheet-metal cans for containing cooked meats. Original dated April 6th, 1875. Reissue, October 23, 1877. The original describes the can pyramidal shaped, rounded corners, and both ends slightly flaring

to form shoulders, against which the heads or end-pieces rest. The description makes the shoulders interior. The edges of the heads turned outwards; the flaring edge of the end of the can is turned inward over the flange, and the three thicknesses of metal pressed together by machinery, with or without solder, so as to make the points air-tight. The meat is to be packed through aperture in large head, afterwards to be hermetically sealed by means of cap, having a vent; and to prevent the meat from closing the vent, it is protected by a trough or gutter, attached to the underside of the piece, open on both ends, or in its place a perforated diaphram. The claim is first for the pyramidal form, rounded corners, and off-set ends to support heads, and heads recurved as shown; second, perforated cap in combination with head provided with protector.

The re-issue is substantially the same in stating the nature of the improvement and the process, but the re issue extends the claim, in addition to those features set forth in the original, to a third, as follows:

Third. An improved article of manufacture, solid meat compressed and secured within a pyramidal case or can, so that said can forms a mold for the meat and permits its discharge as a solid cake, substantially as specified.

At pp. 939 and 940, vol. ii, defendants' testimony, the court will find *a formal admission* by complainants, that conical tin cans were made and used for canning alimentary substances and sealed air-tight prior to the date of the Wilson patents that are the subjects of controversy in the above-entitled causes.

We have left, then, only the pyramidal form as distinguished from the conical—but this with rounded edges; the flanges and three thicknesses, pressed and soldered together, to make the can air-tight; the protector to vent; and the solid meat compressed and secured within a pyramidal case.

It is not deemed worth while to say more as to this third feature of the claim of the re-issue, than that the patent is for an improvement in metallic tin cans; and solid meat compressed and secured in the can is neither within the nature of the invention stated, nor within the pertinent description of

the process of constructing the can, nor within the grant of the patent. It is neither a process nor the product of a process specified. And if it were, still it is the very thing claimed by Marshall's re-issue, and virtually by W. J. Wilson's, inasmuch the meat in the cans may be cooked before canning.

We have further to suggest that if the pyramidal can is essential to the discharge, in solid form, of its contents as described, the previous claims of both Marshall and W. J. Wilson were useless from want of this essential feature; and if not essential, it is clearly not valuable. Besides the same features of can are admitted to have existed before, that is cans larger at one end than the other, and air-tight.

The issues having been made, by the proceedings, as above shown, both sides proceeded to take testimony; and there has been accumulated evidence enough to fill two great books of at least eleven hundred pages each, which affects in the main only the question of novelty. The history of meat-canning in the United States from the earliest period to the present time is given by witnesses who have been engaged in the business from Portland, Maine, to Houston, Texas, and from New York to San Francisco. We have in our argument cited largely from the depositions, in illustration of our different points, and shall rather depend upon such development of the case as will be thus made, than attempt to state the case on the whole testimony, considered here, consecutively.

What is claimed by the defendants is as follows:

WILLIAM J. WILSON'S PATENT.

I. *The disclaimers have been unreasonably delayed, and the delay cuts off the complainants from the benefit of section 4917 U. S. R. Stats., and defeats his action, because the re-issue without a valid disclaimer is unauthorized and void.*

Brooks vs. Jenkins, 3 McLean R. 432.
Hall vs. Wiles, 2 Blatchford R. 194.
Winans vs. N. Y. & E. R. R. Co., 1 Fisher, 213.
Same case, 21 Howard R. 88.
Parker vs. Stiles, 5 McLean R. 56.

II. *The disclaimer is obviously and essentially false, on comparison with original and re-issue; inasmuch as what it disclaims must have been inserted not through inadvertence, but most advisedly, for what it disclaims was inserted in the re-issue to obtain it, and without such insertion the re-issue would not have been possible. Secs. 4816, 4817, R. S. U. S.*

Seymour vs. Osborne, 11 Wallace R. 516.

III. *Without a valid disclaimer the re-issue is void, because executed for other than the same invention as original.*

Seymour vs. Osborne, *supra*.

Powder Company vs. Powder Works, 98 U. S. R. 126.

IV. *There is no patentable improvement in Wilson's process.*

a. This is admitted, virtually, by disclaimer.

b. The want of improvement is shown by the testimony.

c. The difference been roast and boiled meat affords no room for patentable improvement, as there is no improvement in fact; and if there were, none within meaning of the patent law.

d. Corning beef is no part of the process named in patent, and its effect on the popularity of the product cannot be claimed by complainants in favor of alleged improvements; yet it is the corning that is the chief attraction in the market, and corned beef is the only kind made by defendants.

V. *The Wilson patent does not include "processing," and defendants "process" all their products.*

a. The process ends at closing the box air-tight.

"Air-tight" or "hermetically sealed" does not involve the thought of "processing," either by definition or scientific use.

Processing cannot be practiced on a wooden box.

b. By merely closing the package air-tight the meat will not be preserved thereby, and no useful result is obtained.

c. The defendants preserve all their meats by the usual processing method—heating, venting, etc.

VI. *But taking (for the sake of argument) the Wilson patent to extend to all that is claimed for it, it is void for want of novelty.*

The Appert patent destroys the novelty of Wilson's claim to any useful result.

a. It is the Appert process.

Sewell vs. Jones, 91 U. S. Rep. 81.
Brown vs. Piper, 91 U. S. Rep. 37.
Smith vs. Nichols, 21 Wallace R. 118.
Roberts vs. Ryer, 91 U. S. Rep. 159.

Wilson could not enjoin Appert from using his (Appert's) process, even on boiled meat packed warm and solid in package.

b. The testimony shows exact process claimed by Wilson on same material (boiled meat) was used as early as 1851 by many other persons.

W. C. MARSHALL PATENT.

I. *The re-issue appears to be for a process essentially not the same as the original, and is void.*

The re-issue contains what the original does not—

a. Packing *into* the can.
b. The Appert process.

II. *That actually embodied in the patent is not a process, but result of mechanical action; the pressure claimed is the result of machinery, and is not patentable.*

Corning vs. Borden, 15 Howard R. 267.

III. *There is no improvement in the alleged process.*

The process cooks the meat in the can, produces gravy or gelatine, and is the same in result as meat put up in 1845.

IV. *There is no novelty in Marshall's process, granting it all claimed for it.*

a. It works out the oldest known results in canning by the very oldest process.

b. It amounts to nothing more than the Appert process.

c. It is void on its face, as claiming a process and product in common domestic use when patent issued.

JOHN A. WILSON'S SHEET-METAL CAN.

I. *This is for an improvement in metal cans, and cannot support a claim for solid meat.*

a. An aggregation of parts is not a patentable combination.

Curtis on Patents, 4th ed., sec. 111 c.

b. If 3rd claim is for form, it is same as the first part of the claim, which is for the can itself.

c. As packed meat, even Wm. J. Wilson describes it, and all the meats proven to have been canned in any way precede and anticipate it.

II. *There is no patentable improvement in the can as described.*

a. The stipulation that conical cans air-tight were in prior use, surrenders the whole principle of the supposed improvement.

Winans vs. Denmead, 15 Howard R. 330.

b. All the principles of the can have been anticipated by Redmond, Peltier and other patentees.

c. The form is in common domestic use.

NO INFRINGEMENT.

The testimony is positive that the defendants have not infringed either of the patents, if valid.

We are now prepared to discuss these patents more at large, and we beg *to consider first*

W. J. WILSON'S PATENT.

I. *The disclaimers have been unreasonably delayed.*

As we have noted above, in passing, the re-issue on this patent has by the first disclaimer been reduced back directly and solely to the language of the original patent, and the language of the original patent has been limited by the second disclaimer to meat cooked by *boiling*. These disclaimers, made October 13th and 14th, 1880, and filed October 26th, 1880, were, in fact, subsequent to the time defendants had put in their testimony-in-chief.

The statute (sec. 4917, R. S. U. S., last clause), reads, "But no disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it."

We have shown, in our analysis of the pleading, that this fault of the re-issue was averred and insisted on in defendants' answer; and, although its necessity was apparent, the disclaimer was delayed until the proofs showing numerous instances of compressed meat packed in cans, cooked, were adduced and required to be adduced to defeat this re-issue. The complainants awaited the event, and finally and by compulsion filed their disclaimer. This is confessed, virtually, by the act of disclaimer alone; but it is stated in words and circumstantially by E. S. Renwick—complainants' testimony, pp. 1170 (347 cross inter.) to 1174 (end of ans. to 356 cross inter.). We quote. On page 1174 the witness says: "There is no doubt that one of the reasons, although not the only one, which influenced my opinion as to the expediency of one of the disclaimers, was a piece of evidence which has been put in by the defendants in this case, viz.: the Lyman patent."

An unreasonable neglect or delay to enter a disclaimer cuts off the patentee from all the benefits of the section. He not only cannot recover costs, but he can have no right of action.

Brooks vs. Jenkins, 3 McLean R. 432.
Hall vs. Wiles, 2 Blatchford R. 194.
Winans vs. N. Y. & E. R. R. Co., 1 Fisher, 213.
Same case, 21 Howard R. 88.

And if the objection exists the plaintiff cannot recover, even if it is found the defendant has infringed the parts of the plaintiff's invention that are original.

Parker vs. Stiles, 5 McLean R. 56.

II. *The disclaimer is obviously and essentially false on comparison with original and re-issue.*

The disclaimer is not only unreasonably delayed, but it is on comparison with the original and re-issue, based on an absolute misstatement of fact essential to its operation. The misstatement appears on the face of the papers.

When the patentee claims more than that of which he was the original or first inventor, his patent shall yet be valid, provided such claim has been made through inadvertence, accident or mistake, and without any fraudulent or deceptive purpose (sec. 4917, R. S. U. S.), and a disclaimer may be filed for such part as is chosen not to be claimed or held.

If there has been no inadvertence, accident or mistake, or there has been a fraudulent or deceptive purpose, the patent is void and a disclaimer will not avail. Thus the attempt to gain purposely too much is punished by loss of the whole.

The disclaimer is a voluntary act, and upon filing, it becomes effective without any official or legal action by the commissioner. There is nothing, therefore, about a disclaimer making its assertion of inadvertence, etc., *conclusive*.

But upon a re-issue, it *is* conclusively presumed by the court that it was authorized because of error in the original

patent arising from inadvertence, accident or mistake, and without any fraudulent or deceptive intention; because the decision of this matter of fact is confided to the commissioner, and is to be exercised judicially by him.

Seymour vs. Osborne, 11 Wallace R. 516.

The re-issue is, however, authorized only (sec. 4916 R. S. U. S.) when the original is inoperative or void by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery, more than he had a right to claim as new, and when the error has arisen by inadvertence, etc., as we have just above mentioned.

It must follow, therefore, "*ex-necessitate*," that those matters in the re-issue curing the supposed defect of the original, were asserted therein (in the re-issue) not inadvertently, but *ex-industria*, purposely, and under application made and supported according to the regulations of the patent office, to secure a right claimed under the law.

Now, in the re-issue of the W. J. Wilson patent, the only changes made were such, as we have shown above, as extended the process to packing cooked meat, whether warm with cooking or not; these last words in the original being omitted in the re-issue, and this was the whole extent of the change. This change, therefore, was not inadvertent, but, being the only one, was the one essential to distinguish the re-issue from the original and to authorize the re-issue. It was, therefore, insisted on and so purposely obtained. The decision of the commissioner in granting the re-issue is conclusive in this court, that the *inadvertence* was not in inserting the word "preferably" in the re-issue, but in *leaving it out of the original*, and so *vice versa* as to the words "while yet warm with the cooking."

The disclaimer under the re-issue asserts just the contrary, and says this inadvertence was in the inserting them in the *re-issue*, and that the original was entirely correct as to this matter.

An unreasonable neglect or delay to enter a disclaimer cuts off the patentee from all the benefits of the section. He not only cannot recover costs, but he can have no right of action.

Brooks vs. Jenkins, 3 McLean R. 432.
Hall vs. Wiles, 2 Blatchford R. 194.
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The disclaimer is not only unreasonably delayed, but it is on comparison with the original and re-issue, based on an absolute misstatement of fact essential to its operation. The misstatement appears on the face of the papers.

When the patentee claims more than that of which he was the original or first inventor, his patent shall yet be valid, provided such claim has been made through inadvertence, accident or mistake, and without any fraudulent or deceptive purpose (sec. 4917, R. S. U. S.), and a disclaimer may be filed for such part as is chosen not to be claimed or held.

If there has been no inadvertence, accident or mistake, or there has been a fraudulent or deceptive purpose, the patent is void and a disclaimer will not avail. Thus the attempt to gain purposely too much is punished by loss of the whole.

The disclaimer is a voluntary act, and upon filing, it becomes effective without any official or legal action by the commissioner. There is nothing, therefore, about a disclaimer making its assertion of inadvertence, etc., *conclusive*.

But upon a re-issue, it *is* conclusively presumed by the court that it was authorized because of error in the original

patent arising from inadvertence, accident or mistake, and without any fraudulent or deceptive intention; because the decision of this matter of fact is confided to the commissioner, and is to be exercised judicially by him.

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The re-issue is, however, authorized only (sec. 4916 R. S. U. S.) when the original is inoperative or void by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery, more than he had a right to claim as new, and when the error has arisen by inadvertence, etc., as we have just above mentioned.

It must follow, therefore, "*ex-necessitate*," that those matters in the re-issue curing the supposed defect of the original, were asserted therein (in the re-issue) not inadvertently, but *ex-industria*, purposely, and under application made and supported according to the regulations of the patent office, to secure a right claimed under the law.

Now, in the re-issue of the W. J. Wilson patent, the only changes made were such, as we have shown above, as extended the process to packing cooked meat, whether warm with cooking or not; these last words in the original being omitted in the re-issue, and this was the whole extent of the change. This change, therefore, was not inadvertent, but, being the only one, was the one essential to distinguish the re-issue from the original and to authorize the re-issue. It was, therefore, insisted on and so purposely obtained. The decision of the commissioner in granting the re-issue is conclusive in this court, that the *inadvertence* was not in inserting the word "preferably" in the re-issue, but in *leaving it out of the original*, and so *vice versa* as to the words "while yet warm with the cooking."

The disclaimer under the re-issue asserts just the contrary, and says this inadvertence was in the inserting them in the *re-issue*, and that the original was entirely correct as to this matter.

It necessarily results, we submit, that the disclaimer is false, and stultifies those executing it, in so far as it pretends the change in the re-issue from the original was inadvertently made; because there could have been no re-issue but for the change, and the patentee asked the re-issue and must necessarily have obtained it by means and virtue of the change, now pretended to have been made inadvertently, or by accident or mistake.

If, therefore, the re-issue is for a different invention from that claimed in the original patent, and the disclaimer is inoperative to cure it, it is void, and void as to the whole claim; because it just clearly appears the excessive claim was not inadvertent, but of set purpose, and persisted in with a deceptive purpose until defeated and overwhelmed by defendants' testimony.

III. *Without a valid disclaimer the re-issue is void as executed for other than the same invention the original was.*

That the disclaimer was really necessary to save the re-issue (on the complainants' theory that the alleged improvement is in any part a novelty), need hardly be argued, as the complainants, by their act of disclaimer, admit it, and Mr. Renwick, advised it as necessary.

See Renwick's testimony at pages above specified. (Complainants' testimony, pp. 1170–1174.)

A comparison of the specifications of the original and re-issue exhibits the illegal expansion of the re-issue. The process is a process of preserving and packing cooked meats solid, in air-tight packages, and the original claims this package must be done while the meat is yet warm with cooking. The re-issue endeavors to leave this optional with the packer, and claims the beneficial result can be arrived at without packing the meat while yet warm, although it is preferable.

Here is a very great expansion of claim, and as the original patent was for an improvement in process for packing cooked meats, which required it to be done while the meat was yet warm, that improvement was confined to that, and

did not suggest that it could be done with cold meat, but excluded that idea. If packing meat warm was an improvement on the process, packing it cold, if it could be successfully done, was just as much an improvement, but not the same, evidently, as packing it warm, and therefore not to be included in the re-issue. This is plain, we think, and, by the statute and the authorities, the re-issue was, as to packing cold meat, beyond the jurisdiction of the commissioner to grant a re-issue based on W. J. Wilson's original patent.

Seymour vs. Osborne, 11 Wallace R. 516.
Powder Company vs. Powder Works, 98 U. S. R. 126.

The re-issue was, therefore, void, and the attempt to cure it by a false disclaimer failing, it remains void, and will not support this suit to any extent whatever.

IV. *There is no patentable improvement in Wilson's process.*

a. This is admitted, virtually, by the disclaimer against any construction of the word cooked in the patent as applicable to any other cooking than by boiling.

To the full extent of the ordinary meaning of the word *cooked*, the complainants admit they cannot claim. This appears in the second disclaimer, dated October 14, 1880, testimony, vol. i, pp. 920 and 922, where any *construction* of the language of the specification to include cooking, by any other means than by boiling the same in water, *is disclaimed*. In other words, the process, in all essentials, is admitted by W. J. Wilson and his assigns to have been known and used by others before him, as to meat *cooked otherwise* than by boiling; or, to express it in another form, this disclaimer admits the controlling feature of the improvement, as a discovery of Wilson's, rests in the fact, the meat packed is boiled meat, and no other. That is, it is admitted any one may pack cooked meats for transportation by compressing the same, while heated with cooking, into an air-tight, hermetically sealed package, so as to preserve the meat in its integrity, and retain all the natural juices and nutritious qualities of the meat, substantially as set forth in the Wilson patent; and if

only the meat is not cooked *by boiling in water*, there will be no infringement of Wilson's patent. The meat may be roasted, broiled, baked, stewed or steamed, and if so, there is no infringement, although all the rest of the Wilson process is adopted.

b. The want of improvement is shown by the testimony.

What we have just said is plain from the language of the disclaimer. But if any doubt were possible, it is removed by Mr. Renwick, who never fails to reinforce and aid Mr. Wilson on the retreat, whatever may be thought of the strength of his support in an attack.

Mr. Renwick says (among much other to the same effect and in the same connection, and we quote only the most pointed declarations, pp. 1165–1166):

"339 *x-Int.* That is, you think, after the grant of the "original patent as it is, it would have been a new invention "to pack a roast leg of mutton by the process described in "that patent in respect to every step except cooking, which "you say means boiling, provided that the same thing had "not been done before."

"*Ans.* That is, as I understand the question, the leg of "mutton, after being roasted, is to be treated by the same "operations that I understand to be required by the Wilson "original patent to be performed upon the meat subsequent "to its cooking: and I think that under the circumstances "mentioned in the question, the thing stated would have been "a new invention, although the scope of the *original* Wilson "patent is probably broad enough to cover it."

This witness also says (p. 1174), as once before quoted by us, that one reason influencing his opinion as to the expediency of the disclaimer, was a piece of evidence which has been put in by the defendants in this case, viz: the "Lyman patent."

The Lyman patent is to be found in defendants' testimony (pp. 863–870). On p. 864, the patentee states his invention

to be "secondly, an improved mode of preparing and preserving *roast* meat in a condensed and concentrated form." And pp. 866–868, the specification of the Lyman patent reads:

"My improved condensed roast meat differs from the "above (ordinary mode of preserving meat in cans) in its "preparation as follows: Having deprived the meat of a large "per cent. of its water, the juice being concentrated in it, "and the meat at the same time roasted by means of a cur- "rent of dry air, which passes from the heater through the "meat chamber and off into the outer atmosphere, carrying "the moisture with it. I grind, or otherwise reduce the "roughest parts to about the consistence of thick mortar, or "putty, and then pack the best pieces in this reduced meat, "and press it all into a compact mass *in the can*, the inter- "stices being filled with the reduced meat firmly pressed in, "so as to expel the air, instead of filling them with the gravy "or with water, as by the common modes. Sometimes I "grind the whole of the meat and pack the can with it, com- "pressing in it a solid mass, then heat and seal it up from the "air, and re-heat it to combine any free oxygen that may pos- "sibly be left in the can."

And on page 870, the claim is: "6th. As a new manufac- "ture, concentrated roast beef, mutton, pork, or other meat, "prepared and preserved substantially as specified."

This patent is dated July 22, 1869, while Wilson's is dated March 31, 1874. Proof of the exercise of this Lyman process, its nature and existence and the sale of the product, occupies a large part of the mass of the testimony in this case. In view of the admission of Mr. Renwick and the production of the Lyman patent, we do not deem it necessary to ask the court to wade through the hundred pages on this subject. We think it unnecessary to enter into a discussion of all this. The patent speaks for itself, and in so far as it is the same in principle, it destroys the Wilson patent granted five years later than the Lyman process. As we have said, complainants admit the Lyman and the Wilson patents the same save as to difference between roast and boiled meat.

c. The difference between roast and boiled meats affords no room for patentable improvement, as there is no improvement in fact, and if there were, none within meaning of the patent law.

We submit that such difference is not of a nature on which W. J. Wilson was entitled to a patent. The language of the statute authorizing a patent is as follows:

"Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, etc., etc., etc., shall obtain a patent therefor."

The grant to W. J. Wilson is for an improvement in processes of preserving and packing cooked meats. But the whole process is now asserted to be new only as to the meat cooked by boiling. Can it be seriously pretended that one who had observed the process in question practiced as to roast meat, would be considered, within the meaning of the statute, to have invented or discovered any new or useful improvement by applying the same process to boiled meat. Wherein is the improvement if one prefers roast meat? It is claimed to be in the fact that the meat is boiled. But that may or may not be an improvement, according to the taste or desire of the purchaser. Surely no one will pretend that it is true as to mankind in general, that boiled meat is considered an improvement on roast. The lovers of the roast beef of old England would sturdily resist even a judicial decree to this effect. It is against common sense to assert a monopoly based on such a difference.

But we have high authority to further establish the position that even if it were an improvement to have the meat boiled, it is not a patentable invention. In Pearce vs. Mulford (102 U. S. Reports, p. 112), it is said, "all improvement is not invention, and entitled to protection as such. Thus to entitle it, it must be the product of some exercise of the inventive faculties, and it must involve something more than what is obvious to persons skilled in the art."

In the case of the Glue Company vs. Upton (98 U. S. Reps. 3) the following language is used:

"A distinction must be observed between a new article of commerce and a new article which, as such, is patentable; any change in form from a previous condition may render the article new in commerce; as powdered sugar is a different article in commerce from loaf sugar; and ground coffee a different article in commerce from coffee in the berry. But to render the article new in the sense of the patent law, it must be more or less efficacious or possess new properties in combination with other ingredients; not from a new change of form produced by a mechanical division. It is only where one of these results follows that the product of the compound can be treated as the result of invention or discovery, and be regarded as a new and useful article."

If new at all, the article produced by complainants is new merely as an article of commerce, and not as a manufacture. In fact, in the patent it is not claimed as a manufacture, but merely as merchandise.

So, we think, without multiplying words or references, we may rest assured this court will not hold the difference between the old process and the new depending solely upon the fact of the meat being boiled instead of roasted, is such an improvement in the art or manufacture as will support the pretended patent of William J. Wilson.

Uriah H. Dudley, one of complainants' witnesses, a large dealer in canned products, illustrates how business men view this matter. 20th int. (p. 673). "How were these compressed meats regarded here in New York, as far as your knowledge and observation extended, as being an improvement and a novelty, and how did you regard it? *Ans.* I regarded them as a novelty, but I don't know whether they would be called an improvement because not used in the same way as the others; I suppose the trade regarded it much as I do; it was brought into more general use *in this form* than it had ever been before."

d. *Corning* beef is no part of the process named in the patent, and its effect on the popularity of the product cannot be claimed by complainants in favor of alleged improvements; yet it is the *corning* that is the chief attraction in the market, and *corned* beef is the only kind made by defendants.

The complainants have endeavored to make a great deal out of the fact that the canned corned beef of complainants, or such as is like it, has, as an article of commerce, taken possession of the market, fairly driven out all competition; and therefore argue that it must have been a decided improvement, or it could not have done this. There can be no doubt that canned cooked corned beef has met with great success in sales since it came into the market. But it is a remarkable fact that the quality that has secured this success for the meat is not the *boiling*, but the *corning*. Yet the corning is not in the patent; neither stated as part of the treatment by Wilson or in the remotest manner hinted at.

By reference to the patent, the court will find nothing said or suggested as to aught other than cooked meat—nothing is said about the meat's previous treatment, beyond cooking, before canning. Yet the bulk of the meat sent upon the market by the complainants is corned; and that which sells it is chiefly the fact that it is corned. Of course, if this is so, there can be nothing made by complainants because of this quality not even claimed as included in their pretended new article of merchandise.

We refer to the testimony, and in connection therewith to an admission found page 728, vol. of complainants' testimony. Deposition of A. A. Libby (one of complainants), 24th cross inter. "What do you first do with your meat in preparing it for the can, that you call canned corned beef?"

[Same objection, because there are no patents in this case on *corned beef*, no issues involved therewith, and because it is immaterial what any one of the complainants does. The question ought to be, What do your patents cover?]

Ans. "We usually put it in a pickle."

(Pages 728, 729,) 27th cross inter. "Now, what I want is a description of what is done to your meat, preparatory to

putting it in the cans, in the order of its doing and the length of time given to each step.)

[Same objection.]

Ans. "We first take the quarters of the beef; then cut it up in pieces; then pickle it, allowing it to remain in the pickle according to circumstances, from ten to twenty days; then we remove it from the pickle, cook it 212° F. until well cooked; then remove the bone, cut it into pieces of a desirable size; then press it solidly into the can until the entire interior of the can is filled with meat; then we solder on the cap of the can; and then subject it to the process of hermetically sealing; then we clean the can, paint and label it; it is then ready to be boxed for shipping."

Deposition of Horace K. Thurber, complainants' witness (p. 701), answer to 9th inter., speaking of complainants' canned meat: "It was very much more tasty in appearance than any meat I had ever seen canned." Also, p. 700 (foot): "Every one that saw the goods that was in the trade would buy it, and did buy it at once." Page 703, cross examination, 17th cross inter.: "When you speak of the complainants' meat, you mean *canned corned beef exclusively*, don't you?"

Ans. "I do."

20th cross inter. (p. 703): "And *corned* beef turned out to be a favorite article?"

Ans. "It did."

So W. W. Dodge, of San Francisco.

Examined by Mr. Offield, for complainants. p. 880. 14th question. "Are you familiar with the canned meat goods consisting of solid compressed *corned* beef, manufactured and sold by the complainant in this case, and if so, please state when you first saw any *such* canned goods?"

A. "We sell them every day and know them well, and *they* are the first goods I ever saw in *that kind* of tins, and put up in that condition—solid, compressed."

So complainants' witness, Frank Norton, of San Francisco, p. 887, 18th question: "Are you familiar with the meats

packed by Messrs. Libby, McNeill & Libby, of Chicago, called compressed cooked *corned* beef?''

A. "I am familiar with it. That is all solid; they shave it right up. * * * First saw it three or four years ago. I never saw anything like *it* until then," etc.

So of Jennings, p. 902, who is inquired of as to solid *corned* beef.

So the exhibits of product produced will be found to be chiefly *corned* beef.

Furthermore, it is *corned* beef only the *defendants* are shown to have canned.

Frank S. Waters, p. 147.

Q. "Please state in what manner the St. Louis Beef Canning Co. packed its beef in cans prior to June 1st, 1877?"

A. "After the beef was slaughtered, cut up and *cured for about ten days*, it was then boiled," etc., etc.

So as to proofs against Chicago Packing & Provision Co., witness Switzer, p. 170.

x-Q 3. "What was first done to the meat which they canned after it was slaughtered?"

A. "It was pickled * * * between ten and twenty days."

It need be only mentioned to the court that the corning by salt or saltpetre causes the red color of boiled corn beef—which, but for the curing, would be either dark or dull. This is a matter of common knowledge, and is taken notice of by courts as well as individuals.

V. *The Wilson patent does not include "processing," and defendants have not infringed it.*

The complainants assert, and have endeavored to maintain by the testimony, that the Wilson patent, in terms, includes the direction that the cans, when filled, shall be "processed," that is, bathed from two to six hours in boiling water or some other appropriate hot mixture, vented and resealed.

They are driven to this position by two facts fully established in the case: one, that unless "processed," the meat packed in the cans will spoil; and the other, that neither they, the complainants, or, what is more important, the defendants, have ever attempted to preserve meat in cans except by the "processing" method; that is, bathing and reventing.

If, therefore, "processing" is not included in the patent, the complainants' method is impractical. (See complainants' testimony, Frank Gebbie, p. 179; George Burnham, Jr., pp. 213-214; Stephen H. Provost, p. 398—answers to 67th and 68th questions.)

"Processing" is not included in the patent.

a. The process ends in closing the box air-tight.

To arrive at what is intended by the words, "the box or case is then closed air-tight upon the meat;" or, if you choose, "is hermetically sealed upon the meat," we should look at what it is intended to effect by the process. The process is (p. 134) for packing cooked meats for transportation in a compressed form while heated with cooking, into an air-tight package, so as to preserve the meat in its integrity, and retain all the natural juices and nutritive qualities of the meat. The meat is first cooked *thoroughly* at a temperature of 212° Fahrenheit, so that all the bone and gristle can be removed and the meat, yet retain its natural grain and integrity. The meat is *then* in proper condition for eating, and is wholesome and palatable. It is pressed into a box or case, and the box or case is then closed air-tight upon the meat. * * * The meat, the specification continues, thus put up is available at all times, even when cooking is impracticable, as it is already cooked *before it is packed*.

The box may be made of *wood* or metal, or *both* combined, etc.

The volumes of testimony are full of statements by all manner of witnesses, experts, canners, packers, etc., that the process of boiling the cans, filled with whatever material is to be preserved, to expel the air,, is *a cooking process*. It is the applicatlon for hours of boiling water or other heated sub-

stance or heated air, to the exterior of the can, and the necessary result is cooking the contents of the can. So that even raw beef becomes boiled. This is the tenor of the whole testimony. Yet, we are told that before this "processing," especially so-called, is suggested, the meat under Wilson's patent is "cooked thoroughly," is in proper condition for eating, and is wholesome and palatable; that it is already cooked before it is packed. What would be the effect of further cooking that which is announced to be in such a perfect state as cooked food? Necessarily depreciation, disintegration, a loss of integrity, an expulsion of natural juices and nutritious qualities—over-cooking.

If the boiling by processing had been contemplated by the patentee, would he, in giving a reason why the food was available at all times, even when cooking is impracticable, have said, "as it is *already* cooked before it is packed."

Yet, with all of these expressions naturally terminating the process at closing the case air-tight, and with the fact that this process is said to be applicable to a box or case made of wood, or a barrel (where it is said a *barrel* of meat by the patentee's process would weigh only 110 pounds gross), it is attempted to have the construction put on this specification that it involves, necessarily, the further proceeding after closing air-tight, of boiling, venting and re-sealing.

We maintain that any one practicing the process just as stated by W. J. Wilson, would stop at closing the package, when packed, air-tight. The process would be finished when the air outside was excluded; and it is apparent the patentee supposed the air would all be outside, for he distinctly directs the hot meat shall be pressed by a suitable apparatus into the box, with *sufficient* force to *remove* the air. If the air is removed by pressure, and the meat is hot, the thought evidently was no more will be needed than to close the box air-tight, so no air could get back. The object would be attained; the meat packed for transportation.

b. "Air-tight" or "hermetically sealed" does not involve the thought of "processing," either by definition or scientific use.

The word hermetically sealed has a definition in chemistry. The hermetic art is chemistry. A hermetic seal is one perfectly close, so that no air, gas or spirit can escape. (Webster.) The process of preserving food is a process connected with the art of chemistry; a knowledge of it must have been arrived at originally by a study of the effect of air and water, or what air and water contain, on human food, and the question is yet possibly an open one, whether as Mr. Marshall states in his specification, water is the sole or chief cause of decay of meat, or whether the germ of life causing putrefaction, is in the air. These were, at the date of the patents, certainly questions in chemistry, and the Wilson specification is to be interpreted by the meanings words have in the hermetic art, and in that art "hermetically sealed" means "sealed close," so as to prevent escape of air, or if you choose, so as to exclude air. It no more involves the further thought of hot-water tanks, boiling, venting and re-sealing, than it does re-packing the contents. The complainants' expert, Mr. Renwick, makes this admission, p. 999: "As I understand the matter, Winslow used the term in the sense in which I have previously stated it, as used in reference to matters in chemistry and instruments of natural philosophy, etc." (Winslow's patent here referred to is that passed on in Sewall vs. Jones.)

A reference to the specifications of other patents will show that, above stated, is the extent of the meaning of "hermetically sealed," among those endeavoring to use language appropriate to the art of preserving fruit.

Thus also Rees' cyclopedia, published in London, 1819, vol. xxviii. "Provision, preservation of," (found in defendants' testimony, p. 47, et seq.) At page 49, near foot, it reads: "By Messrs. Donkin & Co.'s method, the meat or vegetable to be preserved is first partially cooked by boiling, baking, roasting or otherwise, and then enclosed in canisters or cans of metal, or in bottles of glass or glazed stoneware, which are very carefully closed, with every attention to render them *perfectly air-tight*. *In this state* the cans or bottles are subjected to a second boiling, which is sufficient to complete the cooking, etc.

So Henry Gunter's patent, January 6, 1841, defendants' testimony, p. 66. * * * "I then solder on the other end of each vessel, so that the vessel will be *hermetically closed*, having, in filling, allowed a small quantity of room in each vessel to permit the substance therein to swell. I *then* place a number of such vessels into a large boiler, etc.," (describing the processing of the cans.)

Letters patent of Kermoal, 1854, defendants' testimony, p. 79.

* * * "The box is filled up through a hole in the center, which is afterwards *closed hermetically* by soldering a disc over it. The closed boxes are *then* exposed to steam, at a temperature of 250° F., etc.

So in the Winslow patent, complainants' testimony, p, 994–995–996, cross-examination of Renwick; 92–93 cross ints, and answers, *et seq*.

On page 996, complainants' expert says; "In this patent (referring to one of Winslow's), when speaking of the patentee's own invention, or the invention which he states he made, the term 'hermetically sealed' is undoubtedly used to express an operation distinct from either the subsequent heating and puncturing, or venting and re-sealing and re-heating of the can."

If "hermetically" sealed or "closed air-tight" necessarily involved the further processes here in all these patents specified, why was so much trouble used to say again that which had been already said? Evidently none of these persons understood that it would be sufficient to say, and to stop at saying, "the can is then to be hermetically sealed."

Whatever popular sense may be, in an indefinite way, applied to the product by *dealers*, there certainly is no scientific sense in which "hermetically sealed" can be made to include packing, venting and re-sealing.

c. Processing cannot be practiced on a wooden box

If "processing" was Mr. Wilson's meaning, how did he expect it to be practiced on a wooden box. Was some special

process to be pursued for wooden boxes, and some other for metal cans, and still a third for those packages composed of both wood and metal? Would not the person seeking to use this process have to invent some means to practice it—become the inventor of the means to exercise an invention? How many boxes of wood would he have to boil before he discovered the patentee meant they should be baked?

The trouble of Mr. Renwick, the complainants' expert, in keeping his wooden boxes (stewed or baked) from distortion or destruction, remind one of the perplexities the Confederate soldiers had when, thinking them edible, they attempted to boil, bake or fry the paper collars captured from Union army on Red river, and failed very naturally to arrive at any very satisfactory results.

Mr. Renwick, at last, under the close pursuit of defendants' solicitor, abandons the box to its fate in the following remarkable manner. (Complainants' testimony, 1065–1066).

201 cross-inter.—Then, as you understand the Wilson patent when it states that the box or case is then closed air-tight upon the meat, that doesn't refer simply to the putting in the head or end of the box air-tight, but also means that the wooden box, after it has been processed, shall, in some way be treated with resin and beeswax, or some other varnish, so as to close the pores of the wood. Is that so?

Ans. I understand that the description amounts to a direction to the user, that the box or case, whatever it may be composed of, is to be substantially hermetically sealed, *leaving it to the user*, who may use a box of either wood or metal, or partly of both materials, *to take such means* for putting the box in a suitable condition *as he may see fit; etc., etc.*

If we are correct in this position that the "processing" is not included in the terms of the Wilson Patent, the testimony is that the patent is worthless in practice.

This is a conclusion fairly to be drawn also from the strenuous exertion the complainants make to have "processing" included by construction in their specification: for why should

they so exert themselves if they had a patent that was valuable without the method of "processing?"

The testimony of witnesses we refer to is that of S. H. Provost (defendants' testimony, pp. 398–399), George Bernham, Jr., (same, pp. 213–214), Frank Gebbie (p. 179), who testify that the Wilson process is not practicable.

The testimony is also conclusive that the defendants have at no time preserved, or attempted to preserve, meat in any other way than by use of the method known as "processing;" bathing the cans, and reventing, and that it is this alone that has preserved their meat. So there is no case against defendants, unless "processing" is shown not only to be the complainants' patent, but to be their invention.

V. *But taking (for the sake of argument) the Wilson patent to extend to all that is claimed for it, it is void for want of novelty.*

W. J. Wilson was not the inventor or discoverer of any new and useful art or manufacture; the improvement (if it may be called so) was known or used by others in this country, and patented or described in printed publications in this and foreign countries before the pretended invention or discovery by Wilson, and was in public use and on sale for more than two years prior to Wilson's application.

The nature of Wilson's improvement is described by him to be new and improved processes for preserving and packing cooked meats.

As we have already seen, the preservation of the meat, in a can or box, can be effected only by the exclusion of the air, and the method by which this is to be done, under the Wilson process, taking the complainants' own construction, is by that usually termed processing goods; that is by placing the can when packed into a bath of boiling water, allowing it to remain there for a sufficient length of time (from two to six hours, according to size of package), venting same and resealing the top. This at least, is the way the defendants preserve meat, and unless this is Wilson's patent there has been no infringement by defendants. No matter what else is done,

whether the meat be salt or fresh, raw or cooked, put in by mechanical pressure or gently inserted, made solid or soft, it is the "processing" that preserves the meat. This process is that known as the Appert process, and has received the construction of this Honorable Court in Sewell vs. Jones 91 U. S., Rep., p. 187, where the following language is used in the opinion: "The discovery in question has been of immense benefit to mankind. By means of food preserved in *a compact and nutritious form*, protected from its natural tendency to decay, deserts are traversed, seas navigated, distant regions explored. It is less brilliant, but more useful, than are all the inventions for the destruction of the human race that have ever been known. It is to France that the honor of this discovery belongs, and to Appert, a French citizen. It does not belong to America or to Winslow. Appert's process presents all that we now know upon the subject. It contains absolutely everything *of value* that is contained in Winslow's patent."

a. As to the process for preserving cooked meats then claimed by Wilson, we may assert that it involves the Appert process, or it does not. If it does not, the meat will not be preserved, and the supposed patent is therefore worthless in practice; is not useful. If it does involve the Appert process, it is that process alone that preserves the meat, and there is no novelty in its practice by Wilson.

There are many other patents and publications printed in the defendants' testimony, from pp. 39 to 127, and elsewhere; but we shall at this time confine ourselves to the analysis of the Durand (Appert) patent, made by this Honorable Court in Sewall vs. Jones, 91 U. S. Rep., p. 181, where the court says: "The points following are embraced in this patent:

"1. It is for the purpose of preserving for a long time animal or vegetable food.

"2. The articles thus to be preserved are to be placed in tin or other vessels, so arranged *as to exclude communication with the external air*.

"3. An aperture may be left in the vessel, *at the choice of the operator*, until the effect of the heat shall have taken place, when it is to be closed.

"4. The vessels *thus* prepared are placed in a boiler filled with cold water, which is heated to a boiling point, which boiling shall be continued for such time as shall be required by the substances contained in the vessels.

"5. Although a water-bath is preferred, the inventor declares that he avails himself of heat through an oven, stove, steam-bath, or any other situation fit for gradually raising the temperature and suffering it to cool again.

"6. Vegetables are to be put into the vessels in a raw or crude state; animal substances raw or partly cooked.

"7. The invention is general in its terms, embracing all vegetables and *all animal substances capable of being thus dealt with.*"

It is admitted by complainants by a most formally executed disclaimer, that Wilson claims nothing for any other kind of meat than such as is cooked *by boiling in water*. But they insist that it is patentable to Wilson to unite with the Durand process the previous cooking of meat by boiling in water only, and compressing this meat while yet warm with the cooking into the can, and then submitting to the Durand process.

But, we have just seen, Durand, or Appert, expressly specified animal substances in cans, as subject-matter of the process, whether raw or partly cooked, and that your Honorable Court says the invention, in its *terms*, embraces all vegetables and all animal substances capable of being thus dealt with. And among these is not cooked meat, put into the can by whatever means, to be included, if it may not only be thus dealt with, but must necessarily be thus dealt with to save it?

The insertion of corned beef into a can, and preserving it by the Appert process, is no more than placing a fish into an ice cream freezer—in place of ice cream—and so preserving the fish. Yet this court has decided that this invasion of the fish into the domain of the people's ice cream, is not exactly patentable. Reversing the Circuit Court of Massachusetts which had held in favor of the fish.

Brown vs. Piper, 91 U. S. Rep. 37.

The Supreme Court bases its decision also, in part, upon

the rather ghastly patent of John Good "for a corpse-preserver."

The court says (p. 41): "The thing (the fish process) was within the circle of what was well known before, and belonged to the public. No one could lawfully appropriate it to himself and exclude others from using it in any usual way, for any purpose to which it may be desired to apply it. This is fatal to the patent."

In this case Mr. Justice Swayne also uses the following language, alike applicable here, we submit (p. 42):

"Courts will take notice of whatever is generally within the limits of their jurisdiction; and if the judge's memory is at fault he may refresh it by resorting to any means for that purpose which he may deem safe and proper. This extends to such matters of science as are involved in the cases brought before him." And it is afterwards added:

"It is known that Lord Bacon applied snow to poultry to preserve it. He said the process succeeded 'excellently well.' The experiment was made in his old age, imprudently, and brought on his last illness. Examined in the light of these considerations, we think this patent was void on its face, and that the court might have stopped short at that instrument, and without looking beyond it into the answers and testimony, *sua sponte*, if the objection were not taken by counsel, well have adjudged in favor of defendant."

In Smith vs. Nichols., 21 Wallace. R., 118, Mr. Justice Swayne, in delivering the opinion of the court, holds this language:

"A patentable invention is a mental result. It must be new and shown to be of practical utility. Everything within the domain of the conception belongs to him who conceived it. The machine, the process or product is but its material reflex and embodiment. A new idea may be engrafted upon an old invention, be distinct from the conception which preceeded it and be an improvement. In such case it is patentable. The *prior patentee cannot use it* without the consent of the *improver*, and the latter cannot use the original invention without the consent of the former. But a mere carrying for-

"4. The vessels *thus* prepared are placed in a boiler filled with cold water, which is heated to a boiling point, which boiling shall be continued for such time as shall be required by the substances contained in the vessels.

"5. Although a water-bath is preferred, the inventor declares that he avails himself of heat through an oven, stove, steam-bath, or any other situation fit for gradually raising the temperature and suffering it to cool again.

"6. Vegetables are to be put into the vessels in a raw or crude state; animal substances raw or partly cooked.

"7. The invention is general in its terms, embracing all vegetables and *all animal substances capable of being thus dealt with.*"

It is admitted by complainants by a most formally executed disclaimer, that Wilson claims nothing for any other kind of meat than such as is cooked *by boiling in water*. But they insist that it is patentable to Wilson to unite with the Durand process the previous cooking of meat by boiling in water only, and compressing this meat while yet warm with the cooking into the can, and then submitting to the Durand process.

But, we have just seen, Durand, or Appert, expressly specified animal substances in cans, as subject-matter of the process, whether raw or partly cooked, and that your Honorable Court says the invention, in its *terms*, embraces all vegetables and all animal substances capable of being thus dealt with. And among these is not cooked meat, put into the can by whatever means, to be included, if it may not only be thus dealt with, but must necessarily be thus dealt with to save it?

The insertion of corned beef into a can, and preserving it by the Appert process, is no more than placing a fish into an ice cream freezer—in place of ice cream—and so preserving the fish. Yet this court has decided that this invasion of the fish into the domain of the people's ice cream, is not exactly patentable. Reversing the Circuit Court of Massachusetts which had held in favor of the fish.

Brown vs. Piper, 91 U. S. Rep. 37.

The Supreme Court bases its decision also, in part, upon

the rather ghastly patent of John Good "for a corpse-preserver."

The court says (p. 41): "The thing (the fish process) was within the circle of what was well known before, and belonged to the public. No one could lawfully appropriate it to himself and exclude others from using it in any usual way, for any purpose to which it may be desired to apply it. This is fatal to the patent."

In this case Mr. Justice Swayne also uses the following language, alike applicable here, we submit (p. 42):

"Courts will take notice of whatever is generally within the limits of their jurisdiction; and if the judge's memory is at fault he may refresh it by resorting to any means for that purpose which he may deem safe and proper. This extends to such matters of science as are involved in the cases brought before him." And it is afterwards added:

"It is known that Lord Bacon applied snow to poultry to preserve it. He said the process succeeded 'excellently well.' The experiment was made in his old age, imprudently, and brought on his last illness. Examined in the light of these considerations, we think this patent was void on its face, and that the court might have stopped short at that instrument, and without looking beyond it into the answers and testimony, *sua sponte*, if the objection were not taken by counsel, well have adjudged in favor of defendant."

In Smith vs. Nichols., 21 Wallace. R., 118, Mr. Justice Swayne, in delivering the opinion of the court, holds this language:

"A patentable invention is a mental result. It must be new and shown to be of practical utility. Everything within the domain of the conception belongs to him who conceived it. The machine, the process or product is but its material reflex and embodiment. A new idea may be engrafted upon an old invention, be distinct from the conception which preceeded it and be an improvement. In such case it is patentable. The *prior patentee cannot use it* without the consent of the *improver*, and the latter cannot use the original invention without the consent of the former. But a mere carrying for-

ward, or new or more extended application of the original thought, a change only in form, proportions or degree, the substitution of equivalents, doing substantially the same thing in the same way by substantially the same means with *better results*, is not such an invention as will sustain a patent. These rules apply alike whether what preceded was covered by a patent, or rested only in public knowledge and use. In neither case can there be an invasion of such domain and an appropriation of anything found there. In one case everything belongs to the prior patentee; in the other, to the public at large."

See also Roberts vs. Ryer, 91 U. S. Rep. 159, citing and approving the above.

Apply this rule. Let us suppose Appert an American citizen, and one who has just made the great and beneficent discovery of preserving human food, and to whom the broad patent has just been given, that was conferred so long ago in France. And let us suppose that at this very first period Mr. Wilson could have become acquainted with the specifications of Mr. Appert, so as to learn what was to be done, and he, Wilson, had conceived the idea of preserving by Mr. Appert's process meat cooked by boiling in water and pressed, boneless, into the can, so as to exclude the air and preserve the nutritious juices and integrity of the meat. That finding afterwards that Mr. Appert was also preserving by his process such boiled meat so packed, but to the preservation of which his (Appert's) process was not only applicable but essential, Mr. Wilson should apply to the court for an injunction against Appert. Would your honors hold that Wilson was entitled to an injunction against Appert, so far as boiled meat pressed hot into the can and saved by the Appert process, was concerned; or that Appert would prevail against Wilson, for the Appert process for any human food in the world, cooked or raw, so preserved? The less is included in the greater, and not the greater in the less. "Everything within the domain of the conception belongs to him who conceived it." Wilson is the smallest possible fraction of Appert, if you expand Wilson to his utmost.

All the world, the defendants included, are the heirs of Appert's patent, and what could not be done to Appert, to deprive him of the reward of his great discovery, cannot be done to any of all the people to whom he has left the enjoyment of his discovery.

The complainants seem not to have anticipated the force of these objections, and were quite indisposed to keep within the very circumscribed limits of their original thought of cooked meat, packed warm, and so extended their claim to all cooked meat, packed hot or cold. Before they got down to the day of hearing, however, the defendants presented to their gaze not only the patent of Appert, Durand, Gunter, and the whole army of encyclopedias, but also the patent of Ansel Storrs Lyman, of June 22, 1869, with many witnesses of the manufacture and the sale of the product, showing it cooked meat, pressed into the can and sealed hermetically. Thereupon the complainants fell back upon Renwick, and Renwick fell back upon a disclaimer of all but that which was in the original patent, and the most of that besides. The disclaimer was against cold packing, and against any cooking but boiling in water. But the expert said to the complainants, if they would just stand to boiling in water and packing *the meat hot*, the improvement could be discovered over roasting and packing it even hot, and the result would be a complete triumph; that preserving, by Durand's process, boiled meat, packed hot, was not only not within the domain of the conception of Durand, but not even within the conception of Durand and Lyman combined.

b. Roasting and packing beef solid, in air-tight cans, no more preceded Wilson, than boiling it and packing it in the same way.

We are waiving for the present, but by no means surrendering, that great volume of testimony produced by both complainants and defendants, proving that beef canned and processed by the Durand process, so as to become boiled and solid when cold, was made by the hundreds of thousands and even millions of pounds, not only when California and Australia summoned by their wealth the masses of America and En-

gland, but when the rebellion of 1861 called our armies to the field and awakened at once the patriotism and inventive faculties of our people, as they were never stirred before. Yet all this product of boiled beef, which no one thought to patent, was no more within the domain of the conception of Appert, than is the beef of Wilson, boiled before canning and packed in the can. They were all within such conception. Appert no more suggested boiled beef, boiled after putting into the can and during the process, to be preserved, than he did lobsters boiled before canning, or beef boiled before canning.

c. But we have the testimony of as good and responsible men as the United States affords, as to the boiling before canning and pressing into the can and preserving by Appert's process.

Stephen H. Provost, aged fifty-seven, New York city, a manufacturer of preserved canned products since 1845, p. 390, latter part of answer to 9th inter., says: "Our next system was to cook the meat either by boiling or roasting and packing them in cans without gravies or gelatine, and cook the cans in a bath of boiling water, puncturing the caps of the cans, after three hours' boiling, letting the air escape, soldering and re-boiling the cans in boiling water three hours more; * * from 1849, and running along about a year or two. * * (p. 391) * at least a hundred tons. * * (p. 392) Ans. to 28th inter. The meat was put through the aperture of the can and pressed down with a stick against the sides of the can, and pressed under the lids with the thumbs." * * (p. 395.) Ans. to 51st int.: * the top (of the can) being cut off below the rim, the can being inverted, the contents, from a slight jar or knock of the can, or by the use of a knife, the thin blade run round against the side of the can, so as to slightly loosen it, would come out in solid form like the appearance of a column. * * * (to the next question): if it had been kept in a cold atmosphere it would cut down with a considerable degree of firmness, with quite as much firmness as boiled beef. * * (p. 396) * the difference (from the product of the complainants) would mainly be, between them, the difference resulting from the

corning of the beef before it was cooked and packed in the can. This is repeated over and over under question and cross-question.

George Burnham, Jr., forty-eight years old, of Maine, packer, of firm of Burnham & Morrill, page 199. As to boiled beef prior to 1864. Answer to question 10. The meat was first removed from the bone; then cut into pieces as near as we could guess to the size of the can; then placed in a pot of boiling water and boiled; then removed from the kettle, weighed and filled into the cans; then they were sealed, put through the process of boiling, cleaned, labeled and marked. * * * (p. 209; answer 12.) We jammed the meats into the can with our hands; then put it under the lever made for the purpose, and pressed it in." (p. 201.) This was up to about 1853, 1854. (p. 203.) The same was done at establishment of George F. Lewis. It issued in a solid cake and was sliceable.

This witness repeats this all in detail over and over.

Charles S. Merrill, 43 years old, packer, Portland, Maine, one of the largest in the East (p. 244). At Rumery & Burnham's. Ans. 14. The meat was just taken from the bone first; then cut into pieces of one or two pounds' weight; then either boiled or roasted; then packed into cans. Well, we used to take a small lever and press it in. * * * The can would be full of solid meat. * * * It was then processed. * * *

This and much more by this witness runs through many pages.

He makes an important statement as to complainants' product, p. 259: "I never saw but two cans of complainants' beef opened—one was warm, the other cold. The warm one *had some liquor in the can when opened;* the other had not."

George F. Lewis, p. 222, age sixty-nine, canner, Portland, p. 223. Steam the meat, half-cooked, pressed into can with screw press, sealed air-tight. (p. 224). Bathed it; if opened cold it would come out in one solid piece. * * * (p. 227.)

"I think Mr. Libby must have copied his idea from me." (p. 230. Cross-question, 53.) Do you now testify that the only substantial difference between this article that you put up and the Libby compressed meat is that theirs is *corned*? Ans. "I do."

William K. Lewis, seventy-two years old, Boston, p. 292, and following is to same effect. On page 309 he is asked in cross-examination: Cross-question, 89. Did you, in the process practiced by your firm, ever compress meat while yet warm with cooking into the cans so as to remove the air and all superfluous moisture, and make the meat form a solid cake of compressed meat in the can? *Ans.* Yes, we have, sir—a great many times, sir. I don't know how much air we removed. We have filled cans in that way. I don't know what you call it.

This witness has much more to say to same effect, and although somewhat eccentric he is evidently very much in earnest.

Joseph Stevenson, New York, forty-six years of age, stamper of tinware, states that he was with Wells, Miller & Provost, and in 1850 and 1851 they (Wells & Provost) put up meat, previously boiled, in cans, packed while yet warm, solid. The meat was pressed in with sticks, pp. 705, 706.

Mrs. Ann McGuire Stevenson, p. 721, helped pack in cans boiled meat, in 1850, at Wells & Provost's.

Alexander Hamilton, p. 725, says in effect the same; meat packed solid and came out firm—a stick was used. On cross-examination, p. 733, we find the following:

68 *x-Int.* Then when the English process was used there was no gravy put in, was there?

Ans. No.

69 *x-Int*, When was this English process used—what year?

Ans. The fall of 1850, the end of 1851; that is, to the best of my recollection.

George O. Sanborn, age forty-two, Cambridge, gives a description of the solid corned beef he had seen prior to 1874, in 1862 and 1863; and he gives a description, among other kinds of meat, of one quite familiar to Americans, p. 324, as follows: 25 *Int.* Do you know what compressed beef or meat is as understood in the trade? *Ans.* Yes.

26 *Int.* What is it?

Ans. It is found in two forms in our markets and on our tables. One being found in practice in New England of pressing the corned beef bought from the butchers, and after boiling the same and pressing the meat in divers ways, commonly, as I have seen it at home from my boyhood, having been put upon a platter, covered with a sheet-iron bake-pan, and flat irons and other weights laid thereon, and then when served at the table, sliced therefrom and eaten cold. Secondly, as practiced at the restaurants at New Orleans, in 1862 and 1863. At the Moreau restaurant, such pressed cooked beef was frequently served. And, thirdly, in the market, in the provision shops, as it has been sold by local butchers in the New England markets in the place of canned corned pressed meats. * * * And, fourthly, the pressed canned meats of the various packers.

There is much more to same effect, proving boiled beef packed solid in a can and processed, and sliceable when taken out, was no novelty when W. J. Wilson obtained his supposed patent.

To meet this proof, the complainants bring a number of the persons employed by some of the defendants' witnesses in 1850, who swear there was, as far as they know, no such beef packed. And some of the defendants' witnesses are also confronted with certain *ex parte* affidavits, obtained from them by the complainants' agents and attorneys, written usually by the attorney, and giving but a partial and meager statement of what the witness knew.

The testimony shows that the defendants' witnesses were approached by Mr. Evarts, attorney for complainants, in advance of the examination pursuant to notice as required by

statute; and the methods of Mr. Evarts are stated by himself in complainants' testimony, p. 745.

Speaking of his efforts to get information from Mr. Isaac Kaylor, one of defendants' witnesses, Mr. Evarts says: "Mr. Kaylor has testified to this conversation with me, and I desire to say about that, that he refused to tell me anything at first, unless I paid him fifty dollars in advance; I talked with him quite a while about that, until I saw I could get no information from him as to these matters unless I paid him something, *and I finally offered him a five dollar bill as compensation for his time and trouble in posting me as to the matters I inquired about; he hesitated a good while before he would accept the five dollars.*

Mr. Kaylor was called by complainants (p. 636), and supports the statements of Provost, Burnham and the others, proving the packing solid meat cooked by boiling prior to canning; and he says (pp. 649, 650) he told the gentleman who visited him that he (witness) would have nothing to do with the cases at all. He (the visitor) then said he would pay me for my trouble or time, if I would answer him one question, whether they put up meat boiled in Mr. Provost's factory in 1849, or raw; and I told him the beef was boiled and roasted; and he then gave me a five-dollar bill and left me. I have not seen him since; I don't know who he was.

What weight will this honorable court now give the testimony of those other men whom Mr. Evarts visited, and who have come forward to state what they did *not* see, to refute what has been sworn to by the defendants' witnesses, men of intelligence, position, immense material interests in the communities where they live; men who have risen, by their industry and integrity, from the first small beginnings of laboring men, to the command of a vast commerce.

But there is an additional witness, against whom even the complainants are unable to say a word, even by way of criticism. The testimony of this witness is conclusive against all claim to invention of either process or product by Wm. J. Wilson. We refer to the statements of Dr. Perl, to be found on pp. 550–558 of the defendants' testimony.

Michael Perl, 42 years of age, residence Houston, Texas, practicing physician (p. 551), engaged in the meat-packing business 1868–1869–1870 and part of 1871.

Q. 6. Please explain fully the process you used in putting up meat in cans?

Ans. I put up several kinds of meat; some were Appert system; the others were put up roast beef in cans; also, roast beef put up in extract of meat, and *corned beef* in cans. I put up a few smoked tongues in cans which I sent to a gentleman, Mr. Newman, of the firm of Newman & Co., commission merchants, in New York City. The roast beef was first roasted, and then put up in cans and sealed up, and then filled up with this extract, or concentrated gravy, through the stud hole, and put through the ordinary process. *The corned beef* was first cured as corn beef is, then boiled and cut in suitable-sized pieces to fit the can; then it was rolled up and put in the can, which was then sealed up without any gravy, and then processed. * * *

(p. 552) *Q.* 13. Now the corned beef: did the cooked corn beef entirely fill the cans when packed? *Ans.* It did.

Q. 14. Was this corned beef pressed into the cans by hand or otherwise? *Ans.* By hand only.

Q. 15. How did the canned beef issue from the cans? *Ans.* By cutting the can close to the rim, it could be shaken out in a solid piece from the can.

Q. 16. This solid piece could then be sliced down? *Ans.* Yes, sir.

This witness testifies to using this canned corned beef in his family, giving it to his friends, and (p. 558) he says: "I also gave some to a gentleman who left on a trip north, and he also took some to England."

What becomes of the claim to the novelty of boiling meat in this process, in view of the last quoted testimony? In this last instance the various steps of the process appear to have been taken by the witness. The meat is boiled, pressed into the cans so as to fill the can, is processed, and comes out whole and sliceable. If Wilson saw this in 1868, what did he invent in 1874, so as to now exclude Dr. Perl and all the

world from canning boiled beef? It may be well asserted that Wilson has given nothing for his claim to a patent; he has invented nothing, and the grant to him is without consideration.

We may, therefore, we submit, conclude safely that the W. J. Wilson patent will be held void for the following reasons:

1. The disclaimer on the re-issue, if otherwise effective, has been unnecessarily delayed.

2. The disclaimer is not effective, but false, in stating that the claim disclaimed was inadvertent, when it was in fact the whole on which the re-issue was claimed and founded.

3. That the re-issue is therefore void as being for not the same improvement claimed in the original patent; one being for packing meat warm, the re-issue being for packing meat warm or cold.

4. That the pretended improvement is not patentable, it not being the result of discovery or invention; the disclaimer admitting that roast meat is not included, and the proof showing it, and the difference between boiled and roast being no substantial difference on which the patent may be based, especially when the success of the packed meat is shown to be the result of corning; and which process of corning is not in the patent, or combination.

5. Because the Wilson process in fact ends with the merely closing of the can air-tight upon the meat, and neither directs or suggests processing further, and is worthless; because meat so packed will not be preserved, but soon spoil.

6. That taken for all that is claimed for the process, it is not novel. *a*. It is in effect the Appert process applied to a particular kind of food, boiled meat, and is within the domain of Appert's conception. *b*. The identical process has been practiced by Rumery & Burnham, Lewis & Bro., Wells & Provost, and others, as early as 1850–1851, and by Dr. Perl in 1868–1871.

THE MARSHALL PATENT.

The Marshall patent has expired by the limitation of its own terms. This fact alone might not have affected the com-

plainant's suit, but at the hearing below all claim under this patent was abandoned in argument. This, we suppose, will be done also here. We therefore state merely our positions, out of abundance of caution.

The Marshall patent rested on the original letters from July 12, 1864, to April 6, 1875, nearly ten years, and by the re-issue, it appears that the matter inadvertently omitted from the original, which it was desirable, not to say necessary, the re-issue should set forth, were:

1st. That *water*, alleged in the original to be the *only* destroying agent to meat, should be averred to be only the chief agent in destruction.

2d. That where the original read, "I then subject a given "quantity of the meat to pressure, in a box or cylinder, un- "til all the air is driven out and the space occupied by the "meat agrees with the size of the package it is intended to fill," the re-issue should read, "I then subject a given quantity of the meat to pressure in a suitable mold, and *subsequently into* the packages or boxes intended to receive the same, *until* the air is driven out and the space occupied by the meat agrees with the size of the package or box it is intended to fill."

3d. That while the claim of the original reads, "First, exposing the meat to be preserved, *previous to putting it up in packages*, to a heavy pressure, substantially as, and for the purposes, herein specified," the re-issue claims, "First, the process herein described for packing and preserving meats, the same consisting in subjecting the meat, after it has been exposed to *preserving* processes, as described, to a heavy pressure and packing and hermetically sealing the *so* compressed meat in packages or boxes, substantially as, and for the purpose, herein set forth; and second, as a new article of manufacture, the above-described compressed meat, preserved in solid form, without disintegration or desiccation, in hermetically-sealed packages, substantially as herein set forth."

4th. And where the original read in the specification, "when the meat is in its place the box is hermetically sealed and in this state, retaining all its nutritive qualities the meat will remain perfect as long as the package remains intact,"

the re-issue reads, "when the compressed meat is in its place the package or box is hermetically sealed, *the air remaining* in the same being expelled by the *usual process in canning*. In this state, retaining all its nutritious qualities, the meat will remain perfect as long as the package remains intact."

The expansion of the re-issue is evidently very great, as it extends first to pressure *into the can* until the air is driven out, and to expelling the air remaining by the *usual process of canning*.

That the intent of the re-issue is to require pressure in the can, is apparent, because the words "exposing the meat to be preserved *previous* to putting it up in packages," are carefully omitted from the claim, and words placed in lieu thereof, "subjecting the meat, *after it has been exposed to preserving processes as described* to a heavy pressure *and* packing *and* hermetically sealing the so-compressed meat in packages and boxes, substantially as, and for the purpose herein set forth." It also appears by other expressions to same effect in the re-issue, as compared with the original.

I. *The re-issue thus appears to be for a process essentially not the same as the original, and is void.*

Under this patent there is no disclaimer. We say essentially not the same, because if these are not essential, then the Wilson process that is based largely on the compression in the can, with, as it is there claimed, the canning process added, has itself nothing essentially patentable in it. If not essential to the Marshall patent, they amount to nothing patentable in the Wilson patent. And if essential, and to be included in the suggestion of the specification of the Marshall patent, then the Marshall patent itself destroys the Wilson patent by antedating it, so far as compression in the can is concerned, and processing.

II. *The patent is not a patentable process.*

In fact, the compression, and all that tends to make the product claimed as a new article of manufacture under the

Marshall patent (being, as we have seen, compressed meat, preserved in solid form, without disintegration or desiccation, in hermetically-sealed packages), is attributable to either the antiseptics or the canning process (which are confessedly not new), or to the result of a mechanical operation, and is, within the meaning of the patent, not a process at all.

This is clearly set forth in Corning vs. Borden, 15 Howard Rep. 267: "A process, *ex nomine*, is not made the subject of a patent in our act of Congress. It is included under the general term 'useful art.' An art may require one or more processes or machines in order to produce a certain result or manufacture. The term machine includes every mechanical device or combination of mechanical process and device to perform some function, and produces a certain effect or result. But when the result or effect is produced by chemical action, by the operation or application of some element or power of nature, or of one substance to another, such modes, methods or operations are called processes. A new process is usually the result of discovery; a machine of invention * * * * p. 268. It is when the term process is used to represent the means or method of producing a result, that it is patentable, and it will include all methods or means which are *not* effected by mechanism or mechanical combinations. But the term process is often used in a more vague sense, in which it cannot be the subject of a patent * * * In this use of the term it represents the functions of a machine, and the effect produced by it on the material subjected to the action of the machine. But it is well settled that a man cannot have a patent for the function or abstract effect of a machine, but only for the machine which produces it. * * * In either case (noted by the court) the iron (subject-matter, say) may be said, in the secondary sense of the term, to undergo a process in order to change its *qualities* by pressing out its impurities, but the agent which effects the pressure is a machine or combination of mechanical device.

If Marshall is not the patentee of the preparation by antiseptics, nor of the preservation by the canning process, and has pressed the meat by a machine, is it not apparent that the

only patentable agent (if any) he has, is the machine—the agent of the pressure, the mechanical devices."

This, of course, it is not pretended that the defendants have ever used to any degree whatever.

III. *But there is, in fact, no improvement in any of Marshall's process.*

a. If we adhere to the language and limit of the original patent, it is enough to say that the defendants have never practiced it.

We have considered the true meaning of the words "hermetically sealed," as used in the original patent, and we have found, we submit, in discussing the Wilson patent, that both, in strict definition, and by common acceptation of writers on the subject of preserving meat, and of patentees of similar patents, the words "hermetically sealed" mean only closed air-tight, and do not include or suggest the further process of canning, that is, heating, venting, etc. The assignees of this very patent were well aware of this, and so were careful to insert the canning process as an essential to success in the re-issue. If it is true that the words, "hermetically sealed," mean no more than we here insist on, then the defendants have never attempted to thus pack their product, and there has been no infringement in any particular.

b. But if the canning process is included, the testimony is, first, that the heating process will make "gravy" in the can; and second, that raw meat heated (boiled) in the can is the one product, above all others, that has been made and sold since Appert's day; and with wonderful profusion in this country during the California fever and the war of the rebellion.

If there is one thing that has been proven is this case, there was "gravy" in Wells & Provost's and Wells, Miller & Provost's boiled beef; in Lewis & Bro.'s roast beef; and in Burnham & Merrill's boiled mutton; yet there is sure to be gravy on Marshall's meat.

We will cite the words of a practical canner and an expert, and inflict no more of the depositions, on this point, on the court.

Amasa G. Smith (complainants' testimony, p. 301) says he is forty-seven, and a packer; has been with Lewis & Bro. and Burnham & Merrill, from 1846 to the war. Ans. p. 302 to int. 7.

For the first six years that I worked for Mr. Lewis, each quarter of beef was cut in two pieces; the round of the hind-quarter and the shoulder and neck piece of the fore-quarters, were packed for boiled beef, packed raw; the other portions of the beef were roasted, as near as I can describe that they were four or five pieces mixing in the round and fore-quarter, part of each.

"*Int. 8.* Was there any stock or gravy put into the cans with this raw meat, during the fourteen years referred to?

"*Ans.* Very seldom; but I have seen it used.

"*Int. 9.* From 1846 to 1860, was there any pressure, by levers or sticks, used on the raw meat in the cans, in the packing of it into them?

"*Ans.* There was not.

"*Int. 10.* From 1846 to 1860, what was the condition of this beef thus packed raw, after the cans were ready for sale, as to juice or gravy in the cans?

"*Ans.* There would be on top of the can a small portion of fat; underneath that, around the edges of the can, would be a light beef stock or jelly.

"*Int. 11.* Have you ever opened any of those cans of meat packed raw, put up before 1860, to see whether the pieces would fall apart when poured into a dish out of the can?

"*Ans.* When a can is heated you can pour the gravy off, and the meat will come out in pieces. When a can is cold the can can be opened so that the meat will come out in a solid mass. What I mean by that is, the fat and gravy will hold the meat together if the can is opened on the side and not on the top. The top of the can is cut off round the side."

Now, take the complainants' expert, Mr. Renwick (p. 948):

Int. 32. By Mr. Clifford—What would be the effect of the process of hermetically sealing upon the compressed meat put up as described in the Marshall process?

Ans. According to the Marshall specification, the meat, although treated with an antiseptic, is not cooked before it is pressed into the can, and is hermetically sealed; consequently the process of hermetically sealing would cook the meat in the can and cause it to shrink materially therein, the shrinkage permitting the pieces to separate; hence, when the process was concluded the meat would *not* be in a solid cake, filling the can, and there would be an excessive collapse of the head or sides of the can as it cooled down after sealing."

(Adjourned.)

On cross examination, this expert, on page 987, again says:

* * * "Whereas, according to the said original Marshall patent, the meat, although treated with antiseptics, and although compressed into a solid cake before it is put into the can, is, nevertheless, put in in the raw condition; and consequently, when the can is subsequently hermetically sealed, as it is described to be in the said Marshall patent, the heat which is used in the sealing will cause the meat to shrink in the can, and *to exude more or less gravy, so it would cease to be in a solid cake in the can.*"

See, then, the wonderful improvement. You press meat into a can to make it solid, compressed, meat, and you immediately cook it to pieces, so it exudes gravy and ceases to be solid, and the product turns out to be the old boiled beef of California times and the rebellion. Whether this gravy becomes solid or not makes no difference in the argument. It is gravy at the start in both cases, and runs the same course in each.

We think this court will not expect us to urge the worthlessness of Marshall's patent further on this point.

IV. *There is no novelty in the pretended process of Marshall.*

We have just shown this in what we have said and quoted, and the vast volumes of testimony, on either side, can be opened, at random, and proof will appear that the whole pretended process and product are old.

But, as we have already urged in regard to the Wilson patent, so we say Marshall's pretence is in all useful features but the identical process of Appert. It is the preservation of a raw animal substance by Appert's process — patented in France, and re-patented to Durand in England in 1810.

This Honorable Court has carefully analyzed this old process, and its declaration is, as we have before quoted, "The invention is general in its terms, embracing all vegetables, and all animal substances capable of being thus dealt with."

We think we may rest safely on these considerations without further analysis of the testimony, which can neither add to, nor detract from, the effect of a mere comparison of the two patents, Appert's and Marshall's, with each other in terms and obvious results.

Since Appert's process became the common property of all the world, and was in common use and practice in the homes of our people before either Marshall or Wilson endeavored to appropriate it as a monopoly for themselves, and the want of novelty in their pretended discoveries appears on the face of their patents, this case comes within the principle of Brown vs. Piper, 91 U. S. R. 37, and the decree below should be affirmed without further inquiry than reading the letters themselves.

AS TO THE WILSON CAN.

We learn from this patent, it is for an improvement in sheet-metal cans, and that what is claimed as new is:

1st. A can for packing food, hermetically sealed, and constructed of pyramidal form, with rounded corners and offset ends to support the heads, said heads being secured as shown and described (that is, the three thicknesses of metal pressed together by machinery, with or without solder, so as to make air-tight joints).

2d. The perforated plate (D.) in combination with head (B.) or (C.), provided with a protector, substantially as, and for the purpose, set forth.

3d. As an improved article of manufacture, *solid meat*, compressed and secured within a pyramidal case or can, so that said case forms a mold for the meat and permits its discharge as a solid cake, substantially as specified.

I. *The third claim here is void.*

First. Solid *meat* is not an improvement in sheet-metal cans.

Second. Because, if it is the mold that is claimed, it is nothing more than the first part of the claim, describing the can as pyramidal, with rounded corners, etc.; and

Third. Because it is not novel as compared with even the William J. Wilson process and specifications, to say nothing of all the other meats in can of which so much has already been said and quoted in this argument.

We pass to the form and other features of the can itself.

II. *There is no patentable improvement in the can.*

a. On page 940 (defendants' book), Mr. Clifford's stipulation is in these words:

"It is further stipulated and agreed that the complainants admit that *conical tin cans* were made and used for canning alimentary substances, and sealed air-tight, prior to the date of the Wilson patents that are the subjects of controversy in the above entitled causes."

With this stipulation in force, we are left to consider only the other features of the can, the rounded corners, which effect the change from a conical to a pyramidal form, the fastenings of the heads, and the vent and shield.

These features, if they were new, are not patentable, because there is nothing in them the product of an exercise of the inventive faculties. They do not involve anything more than is obvious to persons skilled in the art of can-making—

or we may say more broadly, the art of working tin and making tin vessels and canning food. The admission above set forth presents an air-tight conical tin can, for alimentary substances, prior to Mr. Wilson's application for his can. With such a can so used, would not the mind of a can-maker naturally comprehend that the one might be changed into a vessel with straight sides and rounded corners; and seeing the top and bottom of the truncated cone made of separate pieces and fastened air-tight, can it be said any one would have exercised any inventive faculty if he planned to make the top and bottom fasten air-tight by any other particular joining together of the pieces; or that seeing a vent used, as it has long been in the canning process, it is an invention to put a simple guard over it to prevent clogging?

In the hundreds of thousands of cans of provisions "processed" for California, Australia, the army and the navy, all of which were "vented," as the whole testimony conclusively proves, there must have been a guard against clogging by shielding the vent, or the "clogging" is a mere pretense. The testimony shows one or the other, and the complainants have not attempted to show the contrary.

Unless the improvement in the sheet-metal can is the product of the exercise of the inventive faculties, and involves something beyond what is obvious to persons skilled in the art to which it relates, it is not entitled to protection under the patent laws.

Pearce vs. Mulford, 102 U. S. R. 112.
Rubber-coated Harness Company vs. Welling, 97 U. S. R. 7.
Collar Company vs. Van Dusen, 23 Wallace R. 563.

A mere aggregation of parts is not combination so as to be patentable. The combination must be new itself, and must produce a new and useful result, not due to the separate action of any one of the devices used in combination, nor attained thereby, but due to the co-operation or reciprocal action of the combined devices.

Curtis on Patents (4th ed.), sect. 111, c. p, 123.

The admission that the prior use of conical air-tight cans for preserving alimentary substances surrenders the whole principle of the pyramidal can without rounded corners.

There is no real difference in principle, in view of the purposes contemplated, between the conical can, admitted to have been in prior use, and the pyramidal can with rounded corners claimed by Wilson.

This is well illustrated in the case of Winans vs. Denmead, 15 Howard Rep. 330, holding it an infringement by defendant to have constructed octagonal and pyramidal cars, when the plaintiff had a patent for such cars in conical form.

The Supreme Court in this case uses the following language applicable to the present case:

"Where form and substance are inseparable, it is enough to look at form only; where they are separable, where the whole substance of the invention may be copied in a different form, it is the duty of the courts and juries to look through the form for the substance of the invention—for that which entitled the inventor to his patent, and which the patent was designed to secure; where that is found, there is an infringement; and it is not a defense that it is embodied in a form not described, and in terms claimed by the patentee."

Thus the conical form of can, admitted to have had prior use—in fact proven to have been in domestic use for forty years (Pocock's, defendants' testimony, p. 924), precludes the adoption of a new pyramidal form as patentable. The substance of the advantage in each can was the taper of the can, so the contents could be easily removed.

Reverse the coal car, where it was intended to resist downward pressure of the coal in transportation, and you have at once the advantage of withdrawing resistance from downward pressure, as in the can. If form of contour made no difference on which to base a defense, so will it not afford complaints a ground for action, with the existence or common use of the substance of the improvement, although in different form or contour.

III. *But, in fact, the can, as described, is not new in any of its features.*

The *Redmond patent*, May 2, 1857 (defendants' book, p. 1000), is for improvement in the manufacture of metal boxes used for containing sardines and other preserved food. On p. 1002 is the claim for the conical form.

The Peltier patent, April 1, 1859 (defendants' book, p. 1008), is for new arrangements applicable to vessels or metallic boxes, designed for various uses, especially for alimentary preserves, and for new processes for making the said boxes.

Specification. The object of the present addition has for its principal aim to guarantee to me different methods proper for making prismatic or pyramidal boxes. * * * Figure 3 is a prismatic box with six sides; and figure 4 a *pyramidal box having also six sides.* It can be seen by a description of the apparatus which can produce these diverse forms, that the number of sides to be given to the box is almost a matter of indifference. On p. 1011, this patent says: "If the box has *rounded corners* the pressing devices may embrace the form of these corners, which they compress simultaneously with the sides."

On p. 1014, this patent says: "In the preserving business when it is a question of submitting filled boxes either to evaporation or the boiling process, we make a small hole upon the cover to allow the steam to escape."

In the fourth addition to Peltier patent of August 13, 1858 (defendants' book, p. 1022), it is said (as to fastening bottom and top to can), "This bottom and this cover have their edges stamped as represented in section (in Fig. 4), so that the edges of the body of the box, slightly pressed, fit exactly into the groove which surrounds the edges of the cover and the bottom."

But the very same form of contour of Wilson's can is not new.

The want of novelty by comparison with patents issued and known previous to John A. Wilson's, is so fully and accurately set forth by Mr. Henry L. Brevoort, in his testimony, that we cannot do better than to refer to and adopt, without

repeating, his language, contained in defendant's testimony, pp. 955–968, and particularly 961–2–3–4.

The testimony, in a word, establishes that the St. Louis Beef Canning Company does not make or use a can like the John A. Wilson can; there is no offset to the St. Louis can; there is no flange to the body of the can; the top and bottom are simply recessed and flanged over the margin of the can body, the heads are not secured by turning the flaring edges of the body of the end of the can over and on the outside of the edges of the heads; but, on the contrary, the margins of the top and bottom are turned and flanged over the straight edges of the body, like a box cover.

Westerbeck, p. 104[1], swears distinctly the defendant never used such a can as the Wilson.

But if the court arrives at the conclusion the cans are the same in equivalents, then we submit, it is impossible to avoid finding that the Wilson is the same as the Peltier's in equivalents, if not identically the same.

We, therefore, confidently submit that the decrees of this Honorable Circuit Court, dismissing the bills in each case, were correct and should be affirmed.

NOBLE & ORRICK,
Solicitors for Defendants.

SUPREME COURT U.S.
FILED
MAR 8 1882
JAMES H. MCKENNEY, CLERK

UNITED STATES CIRCUIT COURT,

Northern District of Illinois.

THE WILSON PACKING COMPANY AND LIBBY, McNEILL & LIBBY,
vs.
THE CHICAGO PACKING AND PROVISION COMPANY.

THE SAME,
vs.
THE ST. LOUIS BEEF CANNING COMPANY.

THE SAME,
vs.
ROBERT D. HUNTER, ET AL.

CERTIFIED COPY OF OPINION OF THE COURT.

Hon. THOMAS DRUMMOND,
Hon. HENRY W. BLODGETT,
PRESIDING.

CHICAGO:
BEACH, BARNARD & CO., LEGAL PRINTERS, 104 RANDOLPH ST.
1882.

Opinion of the Court.

Hon. Thomas Drummond, Hon. Henry W. Blodgett, presiding.

Drummond, J.: These cases have all been argued together, and involve the same questions of law and fact, and are founded upon the re-issued patent of William J. Wilson, No. 6,370, of April 6th, 1875, for a new and useful improvement in the process for preserving and packing cooked meats for transportation, and in the re-issued patent of John A. Wilson, No. 7,923, of October 23d, 1877, for a new and useful improvement in metallic cans for containing cooked meat. The re-issued patent of William C. Marshall, No. 6,451, of May 25th, 1875, for a new and improved process for preserving meats, although set forth in the pleadings, is not relied on in the argument, and need not be further considered as an independent ground of relief. These patents were before us in 1879, in the case of *The Wilson Packing Co. et al.* v. *Pratt*, 11 C. L. News, 353.

The most important questions in the case grew out of the patent of William J. Wilson. In his original patent he stated that, in carrying out his invention, the meat was to be first cooked thoroughly, at a temperature of 212 degrees Fahrenheit, so that all the bone and gristle could be removed and the meat yet retain its natural grain and integrity—that a measured quantity of this cooked meat was then while yet warm with cooking, pressed by any suitable apparatus into a previously prepared box or case,

with sufficient force to remove the air and all superfluous moisture, and make the meat form a solid cake, and that then the box or case was closed, air-tight, upon the meat. It will be observed that he did not distinctly set forth in this original patent in what manner the meat was to be first cooked.

There is in the re-issue no change in the description of carrying out the invention, except that he declares that it is a "preferable" mode of putting the meat cooked into a box or case while yet warm with cooking. The implication of course is that it was not an indispensable part of his description of the invention that it should be thus put in warm. There were two claims in the original, as there are in the re-issue, and the only difference between them is, that, in the original, the first claim states that the cooked meat is to be pressed into an air-tight package "while heated with cooking," these last words being omitted in the first claim of the re-issue.

While these suits have been pending, the plaintiffs have filed a disclaimer of the use of the word "preferably" in the re-issue, thus eliminating it from the description therein contained, and leaving the patent in this respect as it was in its original form. They have also disclaimed the use of the following words of the description in the re-issued patent: "The meat is first cooked thoroughly, at a tem-"perature of 212 degrees Fahrenheit, so that all the bone "and gristle can be removed and the meat yet retain its "natural grain and integrity." And, instead thereof, insert the following words, namely: "The meat is first "cooked thoroughly by boiling it in water, so that all the "bone and gristle can be removed and the meat yet re-"tain its natural grain and integrity."

Waiving the objections which have been made to the validity of these disclaimers, we may now state what the invention of the William J. Wilson patent is. The meat is to be first thoroughly cooked by boiling it in water, so that all the bone and gristle can be removed and the meat yet retain its natural grain and integrity. While yet warm with cooking, it must, by some suitable apparatus, be pressed into a box or case, previously prepared, with sufficient force to remove the air and all superfluous moisture, and make the meat form a solid cake. The box or case is then to be closed air-tight upon the meat. So that the invention contains these elements:

1st. Thoroughly cooking the meat by boiling it in water, removing the bone and gristle.

2d. Placing it while yet warm with cooking into a box or case, and pressing it by some suitable apparatus with sufficient force to remove the air and all superfluous moisture, and make the meat form a solid cake.

3d. Closing the box or case air-tight upon the meat.

It will thus be observed that the first requisite is, that the meat must be thoroughly cooked by boiling it in water, that mode of cooking called "stewing" not being necessarily excluded, unless the words declaring that "the meat yet retain its natural grain and integrity," have that effect. The patent limits the cooking to this particular mode. Baking, roasting, and steaming being excluded as modes of cooking meat.

After the bone and gristle are removed, there is no description given of any particular manner in which the meat is to be treated before it is put into the box or case, unless the use of the language, that, "it is then wholesome and palatable," has that effect.

And although the evidence shows that all of the meat put up by the plaintiffs and which has entered so extensively into the markets of the country for sale is corned meat, that is not a part of the patent, and fresh meat without antiseptics of any kind, if thoroughly cooked by boiling in water, with the bone and gristle removed, and if while yet warm with cooking, put into a box or case, closed air-tight, would be within the description of the patent. Neither is anything said of the extent of the pressure to which the meat is to be subjected when placed in the box or case, except that it must be with sufficient force to remove the air and all superfluous moisture, so that the meat will form a solid cake; nor is the degree of warmth named which must exist when the meat is put into the box or case; neither is any description given of the manner in which the box or case is to be closed air-tight upon the meat.

It is claimed by the plaintiffs that this combination of the manner of cooking and preserving meats for transportation is new, and entitles William J. Wilson to a patent.

It should be stated, that in the original, as well as in the re-issued patent of William J. Wilson, it seems to be implied, by the second claim which is made in each, that the box or case must be *hermetically* sealed. Some criticism has been made upon the use of this word. We do not understand it to mean the same as if it were employed in describing anything as hermetically sealed in a laboratory, but only that the package should be so sealed as to exclude the passage of air into or out of the box or case.

The patentee says, that this box or case may be made of wood or metal, or both combined, of any suitable form

or shape, and of any desired dimensions. It is, perhaps, unnecessary for us to inquire, as all the parties in this case use metal, whether or not the box or case could possibly be made of wood, or whether in order to accomplish the object which the patentee had in view, it must always be made of metal.

We will, therefore, direct our attention, in the first place, to the question, whether or not what William J. Wilson describes in his specifications as just stated, was the proper subject of a patent. The cooking of meat thoroughly, by boiling it in water so that the bone and gristle can be removed, has always been known.

If it be admitted that the box or can must be hermetically sealed in order to be air tight, that was an old device. The Appert process described in Durand's English patent of 1810, required that the vessel (case or box) in which the food was placed should be air-tight, and that has ever since been regarded as indispensable in any process for preserving such food as is the subject of controversy here. Before the date of the patent of William J. Wilson, meat was placed in a package and subjected to pressure to remove the air, and it is clear any superfluous moisture was thus removed from the meat. This is shown in the Marshall patent of 1864, because it is manifest his description of the process necessarily implies the removal of the superfluous moisture from the meat, as well as the removal of the air from the meat, by pressure, and the hermetical sealing of the box or case in which the meat is placed for preservation, transportation and sale. De Lignac (1855) submitted meat to a high pressure in the tin cans in which it was to be preserved, and which, apparently, were hermetically sealed. Lyman (1869) roasted his meat before putting it into the box or can, and

he speaks in his specifications of stewing, *boiling*, or roasting the meat, as being the ordinary mode at that time employed for preserving meat before packing it in cans.

It will thus be seen that, prior to the issuing of William J. Wilson's original patent, in 1874, meat was cooked in various ways; was subjected to pressure by which the air and the superfluous moisture was expelled from it, both before and after it was put in the case or box for preservation, and these boxes or cases were hermetically sealed in order to make them air-tight.

The evidence seems to show that, at the present time, in order most surely to preserve meat, it is necessary to subject the case or can in which the meat is packed to what is called "processing," which we understand to mean this; there is an opening in the can through which the meat is introduced; when the can is filled, the hole is soldered up; it is then subjected to heat, a puncture made, the air and steam permitted to escape, and then the puncture also soldered up. This is not a new operation, but has long been known; in fact, it is substantially described in the Durand patent, as a part of the Appert mode of preserving meat. For although the details here described are not fully given in the Durand patent, still they are necessarily implied from the statement that the aperture is left in the vessel until the heat shall have produced the proper effect, when it is to be closed. In Appert's method of preserving animal and vegetable food, vessels containing it were placed in a boiler filled with cold water, and then heat was applied up to the boiling point, and vegetables were to be put into the vessels in a raw or crude state; animal substances raw or partly cooked. The "processing," as it is termed, is not set forth in the William J. Wilson patent, unless necessarily

implied from the statement that in thus preparing and packing the meat in an air-tight box or case it is a part of the operation. All that the patent says is, that after the meat is put into the box or case and the proper pressure is applied, the box or case is then closed air-tight upon the meat, and if it is also implied that the box, as we have heretofore assumed, is hermetically sealed, still it is not stated that it is to be subjected to the "ordinary process" in canning. It seems to be conceded that the reasons which rendered this necessary in order to properly preserve meat or vegetables, were not well known at the time it was adopted. The theory at present received upon this subject is, that it is necessary to expel from the can or case the air, and what are called the germs of fermentation and putrefaction which exist in the air, and which are destroyed when a high degree of heat is applied, and the air being thus expelled, before it can re-enter, the box is made air-tight. These invisible germs, supposed to be floating in the air, must be killed or removed, or they will enter into the vegetable or animal substances, and in a short time produce putrefaction, and,of course,destroy them as an article of food. There seems to be, therefore, nothing left in the description of the mode of preserving meat pointed out in the patent of William J. Wilson, unless it is in putting the meat, while warm with cooking, into the box or case. Can that be said to be patentable as a part of the mode of preserving meat, even if it be conceded it had never been done before? We think not. No more than if, prior to the date of the William J. Wilson patent in order to preserve meat, it had never been put into a can or case thoroughly cooked. Neither of them seems to require ingenuity, or the exercise of the inventive faculty. It is manifest, when we consider what was known

at the date of the William J. Wilson patent, that these, or other methods, could be adopted, of putting the meat into the case or can for preservation without encroaching upon the domain of the invention of any one. There can be no doubt that, within a few years past, the method of preserving meat adopted by William J. Wilson has caused the article to be extensively used and sold in the markets of this and other countries. That argument has been pressed with great force upon the court in this case. It may be admitted that in all doubtful cases involving the validity of a patent, the fact that a mode described in the patent has gone into extensive use, has and often will, induce courts to decide in favor of the patent. But while this is so, courts ought not, merely because of such use, to sustain a patent. The rights of the public are to be protected as well as those of individuals, and a monopoly should not be allowed unless the right to it is clearly shown.

But the true explanation of the success which has attended this and similar modes of preserving meat may be in the fact, that there has been a tendency in the public of late years to use all kinds of canned meats and fruits to a much greater extent than formerly, owing to the increased care and skill in their preparation and packing; and we think all William J. Wilson, and those who act under him can claim, is, that they have been particularly careful in the selecting, preparing, seasoning, cooking and canning their meat, by which it has acquired a high reputation, and upon that, in our opinion, they must rely, and not upon a monopoly under the patent law.

The John A. Wilson patent of October 23, 1877, reissue number 7,923, is for "an improvement in metallic

"cans for containing cooked meats," * * * * and, as he describes it, "consists in a pyramidal-shaped "can having rounded corners, and both ends slightly flar- "ing to form shoulders against which the head or end "pieces rest."

* * * * "*A* represents the body of my can made "in the form of a truncated pyramid, with rounded cor- "ners and of any desired number of sides, though I pre- "fer to make it with four sides." * * * * "In pack- "ing cooked meats it is done by the means of a plunger "through an aperture in the large head *B*, which open- "ing is afterwards hermetically sealed by means of a cap "or plate *D*." * * * * "The can is to be opened "at the larger end at or near the shoulder a, by means of "a suitable can-opener, so that when the can is reversed "a slight tap on the smaller head c, will cause the sol- "idly-packed meat to slide out in one piece, so as to be "readily sliced as desired."

The claims in controversy here, are the first and third:

1st. "A can for packing food hermetically sealed, and "constructed of pyramidal form, with rounded corners "and offset ends to support the heads, said heads being "secured as shown and described."

3d. "As an improved article of manufacture, solid "meat, compressed and secured within a pyramidal case "or can, so that said can forms a mould for the meat, and "permits its discharge as a solid cake, substantially as "specified."

And to these claims, defendants interpose two defenses:

1st. That the patent is void for want of novelty, so

far "as the two features or claims in question are con-"cerned."

2d. That defendants do not infringe.

It will be seen that the case or can covered by this patent must have certain features or characteristics:

1st. It must be of "pyramidal form, with round "corners."

2d. It may have "any number of sides," although the patentee "prefers four sides."

3d. It must have "rounded corners," and the ends must be "slightly flaring," to form shoulders against which the "head or end pieces rest."

There are some further details of construction, such as the modes of fastening in the heads by turning the flaring heads of the can inward over the flange of the head, so as to make three thicknesses of metal, and, as he said, make a tight joint, "with or without solder," and leaving an aperture or stud hole in the large head, through which the meat is to be forced, which hole is to be closed by a cap. But as no notice is taken of these in the claims, we presume they are not considered as of the substance of the patent.

By a stipulation filed in these cases found on page 942 of defendant's record, it is admitted that "conical tin "cans were made and used for canning alimentary sub-"stances and sealed air-tight prior to the date of the "Wilson patents that are the subject of controversy in "these cases."

The proof also shows the French patent of one Emile Peltier was recorded in April, 1859, wherein he describes

pyramidal shaped cans for the preservation of food by hermetically sealing such cans. We may also add to this from our common knowledge the well known glasses and molds used by housekeepers in domestic life for preserving jellies, boned turkey, head cheese, &c., which were all from the very necessity of the uses to which they were applied more or less flaring, conical or pyramidal in shape, and made so, presumably, for the purpose of turning out, or discharging the contents in a solid cake. If, therefore, there was occasion at the time this patentee entered the field of improvement to use a pyramidal or conical shaped can or case, there was no need to call in the aid of inventive genius to secure or contrive its construction. Those who wanted such a can or case had only to take those forms of cans then in general use, and adapt them by mere mechanical changes to the purpose for which they were designed. With these conical and pyramidal shaped cans well known and described in the art of preserving food, there was not only no room, but absolutely no need for invention in applying them to the purposes of preserving cooked meats. There is nothing in the proof showing, or tending to show, that cooked meats require any different shaped cans to contain or preserve them than do other alimentary substances. The only advantage gained by this shape suggested in the patent is that the solidly packed meat can be more compactly turned out of this form of can in a cake so as to be readily sliced, but it could be equally well turned out of a conical can. In fact, a conical or pyramid shape or flaring can would seem naturally to suggest itself from kindred uses in domestic life almost as part of the idea or suggestion of packing meat solidly in a can for preservation. To come within this claim of the patent the can must not only be

pyramidal in shape, but it must have "rounded corners," and "offset ends to support the heads." The cans shown in the proof to have been used by the St. Louis Beef Canning Company and by Robert D. Hunter *et al.*, are eight-sided, pyramidal shaped cans, that is, they are made with four narrow sides or panels, and four wider ones, while those used by the Chicago Packing and Provision Company are pyramidal shaped cans with rounded corners. But this peculiarity of construction alone can hardly be deemed the subject matter of a patent. In making a pyramidal shaped can of sheet metal it is obvious that the corners would be naturally more or less rounded, unless special pains were taken to avoid that shape and turn the corners squarely. And with conical and pyramidal shaped cans, known to the art, it would not seem to be invention to vary the form of construction by turning the corners with a curve instead of forcing the sheet metal forming the shell of the can into an angle more or less obtuse.

In his specifications describing the mode of constructing his can, this patentee says, "both ends of the body "are made slightly flaring so as to form shoulders or off-"sets against which the heads are to rest." Waiving the question whether this feature of construction in a sheet metal can could be the subject matter of a patent, it is sufficient to say that we do not find this feature in the cans used by any of the defendants, while the complainants' cans, put in evidence, show that they do not confine themselves to this form of construction. All the defendants' cans which are shown as exhibits in the case are made by turning a rim of the head down over the outside of the body, or shell of the can, and fastening the head in place with solder, and none of them have the

" offset ends," called for by the specifications of this patent; and, as we have already said, this seems to be the form of construction practically adopted by the plaintiffs; probably because all packers find they can make a can just as tight and useful and more cheaply by turning the head over the outside of the shell than by following the exact description of the patent. But we also find in the proof that the cans shown to have been used by Gibbie and by Perl as early as 1872, show the offset ends claimed by this patent. The " Gibbie " can has both the " rounded corners " and " offset ends," while the " Perl " can has " offset ends " as a distinctive feature of construction. We have, therefore, conical and pyramidal shaped cans, and the " Gibbie " and " Perl " cans with flat sides but rounded corners and offset ends known and in use long before this inventor entered the field, and feel compelled to reach the conclusion that there was no novelty in the device of a pyramidal shaped can with rounded corners and offset ends as described in this claim.

So that it seems clear to us that the first claim of this patent must be held void for want of novelty. As to the third claim, the proof shows that Marshall packed meat solidly in a can in 1864. He says: " I then subject a given " quantity of the meat to pressure in a box or cylinder " until all air is driven out, and the space occupied by the " meat agrees with the size of the package it is intended " to fill. When the meat is in its place the box is hermet- " ically sealed, and in this state, retaining all its nutritive " qualities, the meat will remain perfect as long as the " package remains intact."

So Lyman, in his patent of 1870, describes his process of packing meats solidly in cans as follows: " I grind or " otherwise reduce the roughest parts to about the con-

"sistency of thick mortar or putty, and then pack the best "pieces in this reduced meat and press it all into a com- "pact mass in the can, the interstices being filled with the "reduced meat firmly pressed in so as to expel the air, "instead of filling them with the gravy, or with water, as "by the common modes. Sometimes I grind the whole "of the meat and pack the can with it, compressing it "into a solid mass, then heat it and seal it up from the air, "and re-heat it to combine any free oxygen that may "possibly be left in the can."

Here, we have in both cases, solid meats, and in one case, cooked meats packed in cans for preservation.

Neither of these patentees tell us the shape of their cans, but we cannot see how, with conical and pyramidal shaped cans well known in the art as packages for the preservation of meats and other food, and the old art of packing or compressing meats solidly into cans, there can be any inventions which should be protected by a patent in taking these well known shaped cans and pressing into them cooked meat so as to form a solid mass or cake. The can was old and the meat cake was old.

The result is, that the bill will be dismissed.

NORTHERN DISTRICT OF ILLINOIS, ss.

I, William H. Bradley, clerk of the Circuit court of the United States for said northern district of Illinois, do hereby certify the above and foregoing to be a true and correct copy of the opinion filed in said court on the 24th day of February, A. D. 1882, in the cause wherein The Wilson Packing Company *et al.* are the complainants,

and The Chicago Packing and Provision Co. *et al.* are the defendants, as the same appears from the original thereof now remaining in my custody and control.

In testimony whereof I have hereunto set my hand and affixed the seal of said court, at my office in Chicago, in said district, this 27th day of February, A. D. 1882.

[SEAL.]

W. H. BRADLEY, *Clerk.*

15-576

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. 252.

THE WILSON PACKING COMPANY, ARTHUR A. LIBBY, ARCHIBALD McNEILL, AND CHARLES P. LIBBY, APPELLANTS,

vs.

WILLIAM B. CLAPP.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF ILLINOIS.

FILED SEPTEMBER 20, 1879.

SUPREME COURT OF THE UNITED STATES.

No. 252.

THE WILSON PACKING COMPANY, ARTHUR A. LIBBY, ARCHIBALD McNEILL, AND CHARLES P. LIBBY, APPELLANTS,

vs.

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APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF ILLINOIS.

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1 Pleas in the circuit court of the United States for the northern district of Illinois, held at the United States court-rooms in the city of Chicago, in the district aforesaid, before the judges thereof, on Saturday, the fifth day of July, in the year of our Lord one thousand eight hundred and seventy-nine, and of our Independence the one hundred and fourth.

WILLIAM H. BRADLEY, *Clerk.*

THE WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
v.
WILLIAM B. CLAPP. } In chancery.

NORTHERN DISTRICT OF ILLINOIS, *set:*

Be it remembered that on the sixteenth day of November, A. D. 1877, came the said complainants, by Messrs. Munday and Evarts, their solicitors, and filed in the office of the clerk of the circuit court of the United States for the northern district of Illinois, at Chicago, in the district aforesaid, their bond for costs and bill of complaint against said defendant in said entitled cause, which said bond and bill
2 are, respectively, in the words and figures following, to wit:

Bond for costs.

UNITED STATES OF AMERICA,
Northern District of Illinois, ss:

Circuit court, October term, A. D. 1877.

WILSON PACKING COMPANY ET AL.
v.
WM. B. CLAPP. } In equity.

I enter myself security for costs in this cause, and promise to pay all costs which may accrue to the opposite party in this action, or to any of the officers of this court, and in default of payment by the plaintiff of any costs ordered or adjudged to be paid by them. I hereby agree and stipulate that execution may issue against my property for any costs taxed against them. Dated this 16th day of November, A. D. 1877.

J. A. WILSON.

(Endorsed:) Filed Nov. 16, A. D. 1877. Wm. H. Bradley, clerk.

Bill of complaint.

In the United States circuit court in and for the northern district of Illinois. In equity.

To the honorable the judges of the circuit court of the United States in and for the northern district of Illinois. In chancery sitting.

3 The Wilson Packing Company, a corporation created and existing under and by virtue of the laws of the State of Illinois, and Arthur A. Libby, Archibald McNeill, and Charles P. Libby, part-

ners, under the firm name and style of Libby, McNeill and Libby, citizens of said State of Illinois, bring this their bill of complaint against William B. Clapp, who is a citizen of said State of Illinois and a resident of said district.

And thereupon your orators complain and say that before the sixth day of April, eighteen hundred and seventy-five, John A. Wilson was the true, original, and first inventor of certain new and useful improvements in sheet-metal cans, not known and used by others before his said invention thereof, and which had not at the time of his application for a patent therefor been in public use or on sale for a period of two years, as your orators verily believe.

And your orators further show unto your honors that said John A. Wilson, so being the inventor of said improvement, and being a citizen of the United States aforesaid, made application to the proper department of the Government of the United States for letters patent therefor, in accordance with the then existing laws of Congress; and he having duly complied in all respects with the conditions and requisi-
4 tions of said laws, such proceedings were had that on the sixth day of April, eighteen hundred and seventy-five, letters patent of the United States for the said improvement and invention, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and bearing date the day and year last aforesaid, were issued in due form of law and delivered to said John A. Wilson, whereby was granted and secured to him, and his heirs, executors, administrators, or assigns, for the term of seventeen years from the day of the date thereof, the full and exclusive right of making, using, and vending to others to be used the said improvement and invention, a description whereof is given in the words of the said inventor in a schedule in writing, accompanied by drawings and references, thereto duly annexed to said letters patent when the same were issued, and made a part thereof, as by the said original letters patent, or a duly authenticated copy thereof, in court to be produced, will fully appear.

And your orators further show unto your honors that afterwards the said John A. Wilson, by and with the consent of your orators, for good and lawful cause, surrendered said letters patent to the Commissioner of Patents and duly made application for a new patent to be issued for the same invention, and accompanied such application with a
5 corrected description and specification, and with the requisite drawings, and in all respects complied with the acts of Congress in such case made and provided; whereupon, on the twenty-third day of October, eighteen hundred and seventy-seven, new letters patent for the same invention last mentioned were, in accordance with law, duly granted, issued, and delivered to said John A. Wilson for the residue of said term of seventeen years; that said last-mentioned letters patent were issued in accordance with and in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and bear date the day and year last aforesaid, and were designated as reissue No. 7923, and that there was, by said reissued letters patent, secured to said John A. Wilson, his heirs or assigns, for the residue of said term of seventeen years from the sixth day of April, eighteen hundred and seventy-five, the full and exclusive right of making, using, and vending to others to be used said original improvement and invention; that a legal corrected description and specification of said original improvement and invention contained in said reissued

letters patent is given in the words of said John A. Wilson in a certain schedule, accompanied by drawings and written references thereto, which was in due form of law annexed to said reissued letters
6 patent at the time the same were issued, and made a part thereof, as by the said last-mentioned original reissued letters patent, or a duly authenticated copy thereof, to be produced as the court shall direct, will fully appear, a copy of which, without the drawings, is hereto annexed, forming part of this bill, marked Exhibit A.

And your orators further complain and say that before the thirty-first day of March, eighteen hundred and seventy-four, William J. Wilson was the true, original, and first inventor of a certain new and useful improvement in processes for preserving and packing cooked meats, not known and used by others before his said invention thereof, and which had not, at the time of his application for a patent therefor, been in public use or on sale, as your orators verily believe.

And your orators further show unto your honors that said William J. Wilson, so being the inventor of said improvement, and being a citizen of the United States aforesaid, made application to the proper department of the Government of the United States for letters patent therefor in accordance with the then existing laws of Congress; and he having duly complied in all respects with the conditions and requisitions of said laws, such proceedings were had that on the thirty-first day of March, eighteen hundred and seventy-four, letters patent
7 of the United States for the said improvement and invention, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and bearing date the day and year last aforesaid, were issued in due form of law and delivered to said William J. Wilson, whereby was granted and secured to him, and his heirs, executors, administrators, or assigns, for the term of seventeen years from the day of the date thereof, the full and exclusive right of making, using, and vending to others to be used, the said improvement and invention, a description whereof is given in the words of the said inventor in a schedule in writing, accompanied by drawings and references thereto, duly annexed to said letters patent when the same were issued, and made a part thereof, as by the said original letters patent, or a duly authenticated copy thereof, in court to be produced, will fully appear.

That said William J. Wilson afterwards, and before the second day of April, A. D. 1875, by an instrument in writing, conveyed said letters patent to your orator said Wilson Packing Company, such assignment being duly recorded in the Patent Office.

And your orators further show unto your honors that afterwards said William J. Wilson, with the advice and consent of said Wilson Packing Company, for good and lawful cause, surrendered said last-mentioned letters patent to the Commissioners of Patents and duly
8 made application for a new patent to be issued for the same invention, and accompanied such application with a corrected description and specification, and with the requisite drawings, and in all respects complied with the acts of Congress in such case made and provided; whereupon, on the sixth day of April, eighteen hundred and seventy-five, new letters patent for the same invention last mentioned were, in accordance with law, duly granted, issued, and delivered to said Wilson Packing Company for the residue of said term of seventeen years; that said last-mentioned letters patent were issued in accordance with and in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior

and countersigned by the Commissioner of Patents, and bear date the day and year last aforesaid, and were designated as reissue No. 6370; and that there was by said reissued letters patent secured to said Wilson Packing Company, its successors or assigns, for the residue of said term of seventeen years from the 31st day of March, eighteen hundred and seventy-four, the full and exclusive right of making, using, and vending to others to be used said original improvement and invention; that a legal corrected description and specification of said original improvement and invention contained in said reissued letters patent is given in the words of said Wilson in a certain schedule, accom-
9 panied by drawings and written references thereto, which was in due form of law annexed to said reissued letters patent at the time the same were issued, and made a part thereof, as by the last-mentioned original reissued letters patent, or a duly authenticated copy thereof, to be produced as the court shall direct, will fully appear; a copy of which, without the drawings, is hereto annexed, forming part of this bill, marked Exhibit B.

And your orators further complain and say that before the twelfth day of July, eighteen hundred and sixty-four, William C. Marshall was the true, original, and first inventor of certain new and useful improvements in process and apparatus for preserving meats, not known and used by others before his said invention thereof, and which had not, at the time of his application for a patent therefor, been in public use or on sale with his consent or allowance, as your orators verily believe.

And your orators further show unto your honors that said Marshall, so being the inventor of said improvement, and being citizen of the United States aforesaid, made application to the proper department of the Government of the United States for letter patents therefor, in accordance with the then existing laws of Congress; and he having duly complied in all respects with the conditions and requisitions of
10 said laws, such proceedings were had that on the twelfth day of July, eighteen hundred and sixty-four, letters patent of the United States for the said improvement and invention, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and bearing date the day and year last aforesaid, were issued in due form of law, and delivered to said Marshall, whereby was granted and secured to him, and his heirs, executors, administrators, or assigns, for the term of seventeen years from the day of the date thereof, the full and exclusive right of making, using, and vending to others to be used the said improvement and invention, a description whereof is given in the words of the said inventor in a schedule in writing, accompanied by drawings and references thereto, duly annexed, to said letters patent when the same were issued, and made a part thereof, as by the said original letters patent, or a duly authenticated copy thereof, in court to be produced, will fully appear.

That afterwards said Marshall assigned said patent to said Arthur A. Libby, by an instrument in writing, which was duly recorded in the Patent Office.

And your orators further show unto your honors that after-
11 wards said Marshall, with the advice and consent of said Libby, for good and lawful cause, surrendered said last-mentioned letters patent to the Commissioner of Patents, and duly made application for a new patent to be issued for the same invention, and accompanied such application with a corrected description and specification and with

the requisite drawings, and in all respects complied with the acts of Congress in such case made and provided; whereupon, on the twenty-fifth day of May, eighteen hundred and seventy-five, new letters patent for the same invention last mentioned were, in accordance with law, duly granted, issued, and delivered to said Arthur A. Libby for the residue of said term of seventeen years; that said last-mentioned letters patent were issued in accordance with and in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and bear date the day and year last aforesaid, and were designated as reissues Nos. 6451 and 6452; and that there was by said reissued letters patent secured to Libby, his heirs or assigns, for the residue of said term of seventeen years from the twelfth day of July, eighteen hundred and sixty-four, the full and exclusive right of making, using, and vending to others to be used said original improvement and invention;

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that a legal corrected description and specification of said original improvement an invention contained in said reissued letters patent is given in the words of said Marshall, in certain schedules, accompanied by drawings and written references thereto, which were in due form of law annexed to said reissued letters patent, at the time the same were issued, and made a part thereof, as by the said last-mentioned original reissued letters patent, or duly authenticated copies thereof, to be produced as the court shall direct, will fully appear.

Your orators further show that various conveyances in writing of said various letters patent have been made and recorded in the Patent Office, whereby your orator the Wilson Packing Company became and now is vested with the legal title to each and all of said several reissued letters patent and the inventions therein set forth, and your orators Arthur A. Libby, Archibald McNeill, and Charles P. Libby, became and now are interested and entitled to share in all sums collected or recovered from parties infringing said patents or either of them.

Your orators further show that previous to the formation of said complainant corporation the said defendant was the equitable owner of an undivided quarter interest in and to said letters patent to said William J. Wilson; that upon the formation of said company he,

13

together with the other owners of said patent, conveyed to said company the entire interest in said patent, and said defendant at that time received from said company in payment for said interest a large amount of stock in said company; that said stock has at all times since it was so issued to said Clapp been of full par value; that said Clapp retained the ownership of said stock until some time in the spring of 1877; that during that time said company's business was profitable and the gains arising therefrom were retained in the business, and thereby the value of said stock was much increased while said Clapp remained a stockholder as aforesaid; that the said patents before mentioned so owned by said Wilson Packing Company represent at the present time, and have ever since it acquired title thereto, a large proportion of its property, and that said William J. Wilson patent at the time said stock was issued to said Clapp in payment therefor constituted the bulk in value of said company's property; that said Clapp was, while a stockholder as aforesaid, an officer of said company, and as such drew a salary from the funds and earnings of said company; that said company was originally started for the purpose of manufacturing the article of compressed cooked meat described in said W. J. Wilson patent, and has never done any other business, and that its

whole capital is invested in patents and in machinery, buildings,
14 and fixtures used in said business.

That the amounts drawn by said Clapp as salary, and the premium which he received upon his said capital stock when he sold the same, were in large measure due to the earnings from said patents, and especially from said J. W. Wilson patent, and that said Clapp was enabled to so sell his stock at a premium by reason of the ownership by said company of said patents; that said Clapp has largely benefited from his interest, direct and indirect, in said patents, and so said complainants aver and charge that he is estopped from denying the validity of the same or of any of them.

And your orators further show unto your honors that the said improvements and inventions patented as aforesaid have hitherto been in the exclusive possession of your orators, and have hitherto been and still are of great value and profit to your orators, and but for the infringement hereinafter complained of your orators would now be in the undisturbed possession and enjoyment of the exclusive privileges secured by said reissued letters patent; that they are engaged in manufacturing and selling the articles described and claimed in said patents and each of them.

Yet the said defendant, as your orators are informed and be-
15 lieve, well knowing the premises, but continuing to injure your orators, and without their consent or allowance, and without right, and in violation of your orators' said rights, has, within the United States, and during the term of said reissued letters patent and during the term of each of them, made, used, and vended, and is still making, using, and vending to others to be used, large numbers of sheet-metal cans and cans of meat, but how many your orators cannot state, but pray that the defendant may discover and set forth the number containing substantially the improvements and inventions, or a material and substantial part thereof, set forth and patented in and by said reissued letters patent, and each and all of them; and thereby the said defendant has infringed, and still does infringe, and your orators fear that in future he will infringe, upon the exclusive rights and privileges secured to your orators as aforesaid, and the defendant has by such infringement made large gains and profits.

And your orators say that they have sustained damages by reason of said infringement in the sum of twenty thousand dollars.

To the end, therefore, that the said defendant may, if he can, show why your orators should not have the relief herein prayed, and may,
but not on oath, answer on oath being hereby expressly waived,
16 and according to the best of his knowledge, remembrance, information, and belief, full, true, direct, and perfect answer make to all and singular the premises, and that he may be decreed to account for and pay over to your orators all gains and profits realised by him from the unlawful making, using, or vending the improvement vested in your orators as aforesaid, and the damages which your orators have sustained thereby, and that the defendant may be perpetually restrained by an injunction to be issued out of this honorable court from making, using, or vending any sheet-metal cans or cans of meat containing the improvements and inventions secured as aforesaid to your orators, or any material part thereof, and that your orators may have such other or further relief as equity may require, and that the defendant may be enjoined, as above prayed, pending the suit, may it please your honors to grant unto your orators not only a writ of injunction conformable to the prayer of this bill, but also a writ of subpœna directed to the de-

fendant, William B. Clapp, and commanding him at a certain time and under a certain penalty to appear before your honors in this court, then and there to answer unto this bill of complaint, and to abide by and perform such decree as the court may make in the premises; and your orators will ever pray, &c.

17 WILSON PACKING COMPANY,
ARTHUR A. LIBBY,
ARCHIBALD McNEILL, AND
CHARLES P. LIBBY,
By MUNDAY AND EVARTS,
Their Solicitors.

MUNDAY and EVARTS,
Solicitors and of Counsel for Complainants.
WEST and BOND,
Of Counsel.
GOODWIN, OFFIELD and TOWLE,
Of Counsel.

18 EXHIBIT B.

Exhibit W. J. Wilson Patent.

UNITED STATES PATENT OFFICE,

William J. Wilson, of Chicago, Ill., assignor by mesne assignments to the Wilson Packing Company. Improvement in processes for preserving and packing cooked meats. Specification forming part of letters patent No. 149276, dated March 31, 1874; reissue No. 6370, dated April 6, 1875; application filed April 2, 1875.

To all whom it may concern:

Be it known that I, Wm. J. Wilson, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in process of preserving and packing cooked meats; and I do hereby declare that the following is a full, clear, and exact description thereof:

The nature of my invention consists in a process of packing cooked meats for transportation in a compressed form into an air-tight package, so as to preserve the meat in its integrity and retain all the natural juices and nutritious qualities of the meat.

In carrying out my invention the meat is first cooked thoroughly at a temperature of 212° Fahrenheit, so that all the bone and gristle can be removed and the meat yet retain its natural grain and integrity. The meat is then in proper condition for eating, and is wholesome and palatable. A measured quantity of this cooked meat is then, preferably while yet warm with cooking, pressed by any suitable apparatus into a previously-prepared box or case with sufficient force to remove the air and all superfluous moisture, and make the meat form a solid cake. The box or case is then closed air-tight upon the meat.

19 The meat is thus packed and compressed in its natural state, that is, without disintegration or desiccation, and it retains all the juices and nutritious qualities of the meat, the compression only removing the superfluous moisture.

The meat thus put up is available at all times, even when cooking is impracticable, as it is already cooked before it is packed. It is more economical, as it is compressed and reduced in weight one-half from the

uncooked weight, being free from bone and gristle and put up in a compact portable shape for transportation, rendering the usual expensive cooperage unnecessary. Besides, there is a great saving in cost of transportation.

A barrel containing two hundred pounds uncooked meat weighs, gross, three hundred and twenty pounds, meat, salt, brine, and barrel, while by my process it would weigh only one hundred and ten pounds gross, making a saving in cost of freight alone of nearly two-thirds.

The box or case may be made of wood or metal, or both combined, of any suitable form or shape, and of any desired dimensions.

Having thus fully described my invention, what I claim as new, and desire to secure by letters patent, is—

1. The within-described process for packing cooked meats for transportation by compressing the same into an air-tight package, so as to preserve the meat in its integrity and retain all the natural juices and nutritious qualities of the meat, substantially as set forth.

2. As a new article of merchandise, cooked meat put up in solid form, in its natural state, without disintegration or desiccation, in hermetically-sealed packages, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of March, 1875.

WILLIAM J. WILSON.

Witnesses:
HENRY P. FULTON,
J. MCDOWELL.

20 EXHIBIT A.

Exhibit J. A. Wilson Patent.

ED STATES PATENT OFFICE.

John A. Wilson, of Chicago, Illinois. Improvement in sheet-metal cans. Specification forming part of letters patent No. 161848, dated April 6, 1875; reissue No. 7923, dated October 23, 1877; application filed October 15, 1877.

To all whom it may concern:

Be it known that I, John A. Wilson, of Chicago, in the county of Cook and in the State of Illinois, have invented certain new and useful improvements in metallic cans for containing cooked meats; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification:

My invention relates to hermetically-sealed cans used in packing meats or other articles; and it consists in a pyramidal-shaped can, having rounded corners, and both ends slightly flaring to form shoulders, against which the head or end pieces rest, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my can. Fig. 2 is a transverse vertical section of the same, reversed.

a represents the body of my can, made in the form of a truncated pyramid, with rounded corners, and of any desired number of sides,

though I prefer to make with four sides. Both ends of the body are made slightly flaring, as shown, so as to form interior shoulders or offsets, *a*, against which the heads B and C are to rest. The edges
21 of these heads are turned outward, as shown at *b*, and the flaring edge, *d*, of the end of the can is turned inward over the flange *b*, and the three thicknesses of metal pressed together by machinery, with or without solder, so as to make air-tight joints.

In packing cooked meats it is done by means of a plunger through an aperture in the large head B, which opening is afterwards hermetically sealed by means of a cap or plate, D. In the plate D is a vent or opening, *i*, to allow the air or gases to escape that are generated while hermetically sealing the can; and to prevent the meat from closing said vent, it is protected by means of a trough or gutter, *h*, attached to the under side of the plate, which trough is open at both ends; or, in place of this trough, a perforated diaphragm may be used to answer the same purpose. The can is to be opened at the larger end, at or near the shoulder *a*, by means of a suitable can-opener, so that when the can is reversed again a slight tap on the smaller head C will cause the solidly-packed meat to slide out in one piece, so as to be readily sliced as desired.

Having thus fully described my invention, what I claim as new, and desire to secure by letters patent, is:

1. A can for packing food, hermetically sealed, and constructed of pyramidal form, with rounded corners and offset ends to support the heads, said head being secured as shown and described.

2. The perforated plate D, in combination with head B or C, provided with protector *h*, substantially as and for the purpose set forth.

3. As an improved article of manufacture, solid meat compressed and secured within a pyramidal case or can, so that said can forms a mold for the meat and permits its discharge as a solid cake, substantially as specified.

JOHN A. WILSON.

Witnesses:
EDWARD S. EVARTS,
FORDE R. SMITH.

(Endorsed:) Filed November 16, 1877. Wm. H. Bradley, clerk.

22 On the same day, to wit, the 16th day of November, A. D. 1877, a writ of subpœna issued out of said clerk's office to said defendant in said-entitled cause, which said writ, with the return of the marshal endorsed thereon, is in the words and figures following, to wit:

Writ of subpœna.

UNITED STATES OF AMERICA,
Northern District of Illinois, ss:

The United States of America to William B. Clapp, greeting:

We command you that you appear before our judges of our circuit court of the United States of America for the northern district of Illinois, at Chicago, in said district, on the first Monday in the month of January next, to answer the bill of complaint of the Wilson Packing Company, Arthur A. Libby, Archibald McNeil, and Charles P. Libby, partners, &c., as McNeil and Libby, this day filed in the clerk's office of said court, in said city of Chicago, then and there to receive and abide

by such judgment and decree as shall then or thereafter be made, upon pain of judgment being pronounced against you by default.

To the marshal of the northern district of Illinois to execute.

Witness the Hon. Morrison R. Waite, Chief Justice of the Supreme Court of the United States of America, at Chicago
23 aforesaid, this 16th day of November, in the year of our Lord one thousand eight hundred and seventy-seven, and of our Independence the 102d.

[SEAL.] WM. H. BRADLEY, *Clerk.*

MEMORANDUM.—The above-named defendant is notified that unless he shall enter his appearance in the clerk's office of said court, at Chicago aforesaid, on or before the day to which the above writ is returnable, the complainants' bill will be taken against him as confessed, and a decree entered accordingly.

WM. H. BRADLEY, *Clerk.*

I have served the within writ within my district, in the following manner to wit: Upon William B. Clapp, therein named, on the 17th day of November, A. D. 1877, by personally delivering to him a true copy of the same on the aforesaid day.

JESSE S. HILDRUP, *U. S. Marshal,*
By L. O. GILMAN, *Deputy.*

(Endorsed:) Filed Nov. 19th, A. D. 1877. Wm. H. Bradley, clerk.

24 Afterwards, to wit, on the 10th day of December, A. D. 1877, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY
v.
WILLIAM B. CLAPP. } In chancery.

On motion, leave is given complainant to amend the bill of complaint herein, which said amendment is now filed herein.

And on the same day, to wit, the 10th day of December, A. D. 1877, said complainants, by their solicitors, filed in said clerk's office their amended bill of complaint in said-entitled cause, which said amended bill of complaint is in the words and figures following, to wit:

Amended bill of complaint.

Circuit court of the United States for the northern district of Illinois.

WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
v.
WILLIAM B. CLAPP. } In equity.

And now come the complainants, by Munday and Evarts, their solicitors, and, by leave of the court first had and obtained, amend their bill of complaint by substituting for the matter on pages 12, 13, and 14 of said bill the following:

25 Your orators further show that your orator the Wilson Packing Company was organized in May and June, 1874, for the special purpose of manufacturing and selling the article of manufacture described in said letters patent to said William J. Wilson; that the defendant was one of the original subscribers to the capital stock of said company, and upon its organization became its president, and continued to hold that office so long as he remained a stockholder therein, which was until the spring of 1877; that previous to the organization of said company the defendant became the owner of an undivided one-fourth interest in said William J. Wilson patent, and was such owner until he conveyed the same as hereinafter stated; that upon the completion of such organization the defendant and other parties owning said William J. Wilson patent sold the same to said company, and the latter, through its said president and other managing officers, purchased the same, and issued and delivered to the defendant and said other owners certificates of shares of its capital stock to a large amount in payment therefor; that subsequently said company, through its said president and other managing officers, paid out a considerable sum of its money for said John A. Wilson patent, in consideration of the conveyance thereof to the company; that afterwards, and in the year 1875, said company, through its said president and other managing officers, purchased said Marshall patent, and paid therefor by dividing its exclusive rights under said W. J. Wilson and J. A. Wilson patents with the said complainants Arthur A. Libby, Archibald McNeill, and Charles P. Libby. That in all said *said* transactions said complainant company was represented by the defendant as its president and principal officer, and he aided and advised in each of them whatever was done.

26 Your orators further show that a very large portion of the capital of said Wilson Packing Company is invested in said patents; that it has never done any other than the business aforesaid, and has no power to engage in any other; that such of its capital as is not invested in said patents has been put into buildings, machinery, and appliances for carrying on said business, and specially adapted to the wants and requirements of the same; that the amount so invested in buildings, machinery, etc., is very considerable; that the success and value of said business depends largely upon the protection afforded by said patents, and that upon the success of the business depends in turn the value of said buildings, machinery, etc.

That the stock so delivered to the defendant in payment for said William J. Wilson patent at all times possessed an actual value, equal to the amount thereof at par, and for most of the time the same was owned by the defendant it had a value considerably in excess of its face, and the defendant sold the same and realized thereon a large premium.

Your orators further show that the defendant, during his connection with said company, received and drew from said company a salary for his services as such president, and that while so employed and paid by said company he became familiar with said business, and formed an extensive acquaintance among dealers and jobbers, to whom and through whom the said company's manufacture was sold, and that in the infringements hereinafter complained of the defendant has greatly profitted by the knowledge and acquaintance aforesaid.

Your orators further aver that the exclusive right to practice said inventions, and each of them, is now divided between your orators, and no others. That your orators are now, and for upwards of two years have been, actively engaged in manufacturing said inventions

27 and each of them, and have introduced the same into very extensive and general use, and have paid out very large sums of money in advertising and bringing the same before the public, and your orators Arthur A. Libby, Archibald McNeill, and Charles P. Libby, as well as said Wilson Packing Company, have large amounts invested in said business. That the defendant, in the acts of infringement hereinafter mentioned, has entered into direct and active competition with your orators, and has thereby deprived them of many sales and large amounts of profits which they would otherwise have made and realized.

Your orators aver that the defendant has greatly benefitted by said patents, and his interest, direct and indirect, therein. And they are advised by counsel, and charge, that by reason of the matters herein set forth the defendant is estopped from questioning the validity of said patents, or either of them.

Your orators further say that any attack upon said patents, or any of them, is calculated to injure and does injure the reputation thereof, and stimulates infringements thereon, and thereby injures and damages the complainants. That notwithstanding the matters aforesaid, and although the defendant in good conscience and equity ought not to attack or in any way bring in question the validity and binding force of said patents, yet he does in fact give out and allege that the same are invalid, and sets up by way of excuse for his said acts of infringement that he is not bound to respect the same because of such alleged want of validity, and by his open violation of said patents is doing great injury to the complainants by inducing others to violate the same.

WILSON PACKING COMPANY,
ARTHUR A. LIBBY,
ARCHIBALD McNEILL, AND
CHARLES P. LIBBY,
By MUNDAY AND EVARTS,
Their Solicitors.

28 Circuit court of the United States for the northern district of Illinois.

WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles T. Libby	In equity.
v.	
WILLIAM B. CLAPP.	

UNITED STATES OF AMERICA,
Northern District of Illinois, ss:

John A. Wilson, being duly sworn, says he is the secretary and treasurer of the Wilson Packing Company, one of the above-named complainants; that he has read the original bill of complaint filed in the above-entitled cause, and also the foregoing amendment thereto; that the said bill and amendment are true of his own knowledge, except as to such matters and things as are therein stated on information and belief, and as to those he believes said bill and amendment to be true. Affiant further says he is the patentee named in the said reissue patent No. 7923, sued on in this cause, and that he now believes himself to be the first and original and true inventor of the things described and claimed in said reissue. He also says the title to said several patents sued on is as stated in the bill of complaint.

J. A. WILSON.

Subscribed and sworn to before me this 7th day of December, A. D. 1877.

[SEAL.] EDMUND ADCOCK,
Notary Public.

29 (Endorsed:) Filed December 10, 1877. Wm. H. Bradley, cl'k.

Afterwards, to wit, on the 15th day of December, A. D. 1877, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY
v.
WILLIAM B. CLAPP. } In chancery.

Now come the parties, by their solicitors, and now comes on to be heard the motion of the complainant for a preliminary injunction against defendant herein; and after hearing the same in part, on motion of defendant's solicitor the further hearing of the same is postponed until the fifth day of January next. Affidavits of defendant are to be filed herein by the third day of January next.

Afterwards, to wit, on the fifth day of January, A. D. 1878, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
v.
30 WILLIAM B. CLAPP. } In chancery.

The motion for a preliminary injunction by the complainants coming on this day to be heard upon the bill of complaint and affidavits filed, and the same having been fully argued by counsel for the respective parties, and the court being now fully advised regarding the same, doth order that a preliminary injunction do issue restraining the defendant as prayed in and by the bill of complaint, and that the defendant, his agents, employees, servants, workmen, and attorneys, be enjoined pending the suit, or until the further order of the court, from directly or indirectly making or causing to be made, using or causing to be used, vending or causing to be vended, the article of preserved meat described and claimed in any of the letters patent sued on in this cause, and especially that he and they do absolutely desist and refrain from directly or indirectly using or selling any of the preserved meats put up by the St. Louis Beef Company of St. Louis, Missouri, and mentioned in the affidavits filed.

Afterwards, to wit, on the 4th day of February, A. D. 1878, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY
v.
WILLIAM B. CLAPP. } In chancery.

31 Now come the parties, by their solicitors, and the court having considered and being now fully advised upon the motion of the

defendant to dissolve the injunction heretofore entered herein, sustains said motion, and orders that said injunction be, and the same is hereby, dissolved; and on motion of said defendant's solicitors it is ordered by the court that time for said defendant to answer the bill of complaint herein be extended fifteen days.

Afterwards, to wit, on the 18th day of February, A. D. 1878, said defendant, by his solicitors, filed in said clerk's office his demurrer to the amended bill of complaint in said-entitled cause, which said demurrer is the words and figures following, to wit:

Demurrer to amended bill of complaint.

UNITED STATES OF AMERICA,
Northern District of Illinois:

In the circuit court of the United States.

THE WILSON PACKING COMPANY, A CORPORATION under and by the laws of the State of Illinois, Arthur A. Libby, Archibald McNeill, and Charles P. Libby, partners under the firm-name of Libby, McNeill and Libby,
v.
WILLIAM B. CLAPP. } In equity.

32 The demurrer of the defendant, William B. Clapp, to the bill of complaint, as amended, of the Wilson Packing Company, a corporation under and by the laws of the State of Illinois, and Arthur A. Libby, Archibald McNeill, and Charles P. Libby, partners under the firm-name of Libby, McNeill and Libby, complainants.

This defendant, by protestation, not confessing or acknowledging all or any of the matters and things in said amended bill of complaint to be true in such manner and form as the same are therein and thereby set forth and alleged, doth demur thereto, and for causes of demurrer sheweth:

That in case the allegations in the said amended bill were true as therein set forth, which he does not admit, the said amended bill contains not any matter of equity whereon to sustain such writ of injunction as is sought and prayed for in and by the said amended bill.

That the said complainants have not in and by their said amended bill made or stated such a case as entitles them in a court of equity to any discovery or relief from or against this defendant touching the matters contained in their said amended bill, or any of such matters.

That the said complainants have not in and by their said amended bill made or stated such a case as entitles them in a court of
33 equity to the estoppel claimed and sought therein, and the defendant is not estopped by any of the matters therein set forth, in the manner that the same are stated and alleged, from attacking the validity of the patents, or any of the patents, claimed by the complainants, or any of them. That it nowhere appears in and by said amended bill that this court has jurisdiction of this cause; that it is nowhere alleged that the defendant has committed, or is about to commit, any act of infringement of any of the alleged patents of the complainants within the northern district of Illinois.

Wherefore, and for divers other good causes of demurrer appearing in the said amended bill of complaint, this defendant doth demur to said amended bill, and to all the matters and things therein contained, and humbly prays the judgment of this honorable court whether he shall be compelled to make any further or other answer to said amended bill of complaint; and prays to be hence dismissed with his reasonable costs in this behalf sustained.

We certify that in our opinion the foregoing demurrer of William B. Clapp, defendant to the amended bill of complaint of the Wilson Packing Company and Libby, McNeill and Libby, complainants, is well founded in law and proper to be filed in the above cause.

ELDRIDGE AND TOURTELOTTE,
Solicitors and of Counsel for Defendant.

34 UNITED STATES OF AMERICA,
Northern District of Illinois, ss:
STATE OF ILLINOIS, *Cook County, ss:*

William B. Clapp, being duly sworn, does depose and say that he has read the foregoing demurrer to the amended bill of complaint in this suit, and that the same is not interposed for the purpose of delaying said suit or any proceedings therein.

WILLIAM B. CLAPP.

Subscribed and sworn to before me this 16th day of February, A. D. 1878.

[SEAL.] JOHN. G. REID,
Notary Public.

(Endorsed:) Filed Feb. 18th, 1878. Wm. H. Bradley, clerk.

Afterwards, to wit, on the 21st day of February, A. D. 1878, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY
v.
WILLIAM B. CLAPP. } In chancery.

On motion of defendant's solicitors the time for defendant to answer herein is extended until to-morrow morning.

35 Afterwards, to wit, on the 25th day of February, A. D. 1878, said defendant, by Messrs. Eldridge and Tourtelotte, his solicitors, filed in said clerk's office his answer in said-entitled cause, which said answer is in the words and figures following, to wit:

Answer.

36 In the United States circuit court in and for the northern district of Illinois.

THE WILSON PACKING COMPANY, A CORPORATION under and by virtue of the laws of the State of Illinois, Arthur A. Libby, Archibald McNeill, and Charles P. Libby, partners, under the firm name and style of Libby, McNeill & Libby, *vs.* WILLIAM B. CLAPP.	Answer.	In equity.

The answer of William B. Clapp, defendant to the bill of complaint of the Wilson Packing Company, a corporation, etc., and Arthur A. Libby, Archibald McNeill, and Charles P. Libby, partners under the firm name and style of Libby, McNeill & Libby, complainants.

This defendant, now and at all times hereafter saving and reserving to himself all and all manner of benefit of advantage of exceptions which may be had or taken to the many errors and insufficiencies in the complainants' bill of complaint contained for answer thereto, or unto so much and such parts thereof as this defendant is advised is material or necessary for him to make answer unto, he answers and says:

That he denies that the said John A. Wilson, before the sixth day of April, A. D. 1875, was the true, original, and first inventor of the
37 improvements in sheet-metal cans which had not been known and used by others before that time, as mentioned in said bill; that he has been informed, and admits it to be true, that upon application by the said John A. Wilson letters patent of the United States were granted and issued to the said John A. Wilson, on the sixth day of April, A. D. 1875, for alleged improvements in sheet-metal cans, and this defendant says that he does not know, and is not informed, save by said bill of complaint, whether or not said John A. Wilson did properly make application for said patent, and did comply with all the requirements of law, and did have said patent issued to him in due form of law, and he therefore leaves the complainants to make proof thereof.

And this defendant, on information and belief, denies that by virtue of any such patent issued to the said John A. Wilson on the sixth day of April, A. D. 1875, as mentioned in said bill of complaint, he, the said John A. Wilson, became or was ever possessed of or vested with any exclusive right to make, use, and sell in the United States or elsewhere the alleged invention patented by the said letters patent.

And this defendant says that he is informed, and believes it to be true, that the said specifications in said letters patent mentioned, so alleged to have been issued to said John A. Wilson, as set forth in the specifications as annexed to said letters patent, are incomplete and ambiguous, and do not set forth in what the said alleged improvements consist, or what it is an improvement upon.

And this defendant says that the said letters patent to John A. Wilson, issued on April sixth, A. D. 1875, and the matters and things therein set forth, specified, and claimed, do not contain such a claim as is patentable or can be patented under and by virtue of the laws of the United States.

And this defendant, further answering, says that he is informed, and believes it to be true, that the said invention and discovery, and
38 the same principles and combinations, patented in and by the said letters patent issued to the said John A. Wilson, bearing date April sixth, A. D. 1875, mentioned in said bill of complaint, was and were in public use in the United States, to wit: In the city of Portland, in the State of Maine, by J. Winslow Jones, as early as the first day of January, A. D. 1871; by Rumsey & Burnham, in said city of Portland, State of Maine, as early as the year A. D. 1855; by W. K. Lewis & Co., in said city of Portland, State of Maine, as early as the year A. D. 1867; by a man by the name of Davis, in said city of Portland, State of Maine, as early as the year A. D. 1867; by the firm of Kemp, Day & Co., in the city of New York, State of New York, as early as the year A. D. 1849.

And had been in such public use for more than four years before the sixth day of April, A. D. 1875, the date of the alleged application of the said John A. Wilson, patentee as aforesaid, for a patent therefor.

And this defendant, further answering, denies that the said invention so patented to the said John A. Wilson is of great or any utility and value, or that the public generally have acquiesced in and acknowledged the complainants' exclusive right to the same or any portion thereof.

And this defendant, further answering, says that he does not know, and is not informed, save by said complainants' bill, whether or not the said John A. Wilson surrendered the said above-mentioned patent, as alleged in said bill of complaint, and made a new application for a new patent to be issued for the said alleged invention, and accompanied the same with a corrected description and specifications, as alleged, on which it is claimed by said complainants in their said bill a new patent was issued to the said John A. Wilson on the 23d day of October, A. D. 1877, nor whether the said John A. Wilson did properly make application for said reissue of said patent, and did comply with all the requirements of the law, and have said patent last above mentioned issued in due form of law and he therefore leaves the complainants to make such proof thereof as they may deem material.

39 And this defendant, further answering, says that he has been informed, and admits it to be true, that upon application made by one William J. Wilson letters patent of the United States were granted and issued to the said William J. Wilson, on the 31st day of March, A. D. 1874, for an alleged improvement in process for preserving and packing cooked meats, and this defendant says that he does not know, and is not informed, save by complainants' said bill of complaint, whether or not the said William J. Wilson did properly make application for said patent, and did comply with all the requirements of the law, and have the said patent issued to him in due form, and he therefore leaves the complainants to make proof thereof.

And this defendant, further answering, says that he admits that the said William J. Wilson, on or before the second day of April, A. D. 1875, did make an assignment of the said letters patent issued to him as aforesaid to the said The Wilson Packing Company, but this defendant does not know whether the said assignment was recorded in the Patent Office or not, and he leaves the complainants to prove the same as best they may.

And this defendant, further answering, says that he admits the said William J. Wilson did surrender the said patent last above mentioned, and did make an application for a new patent to be issued as alleged,

but this defendant says that as to whether or not said application for said reissue of said patent was properly made, and as to whether or not he did comply with all the requirements of the law for said reissue, in all things, he does not know, and he leaves the complainants to make proof thereof as best they can.

And this defendant, further answering, says that he has been informed and admits that letters patent were reissued to the said The Wilson Packing Company on the last above-mentioned application, but whether the same were so issued in accordance with and in due form of law he has no knowledge, and he leaves the complainants to prove the same.

40 And this defendant, further answering, says he is informed and believes it to be true, that the description of the alleged invention as set forth in the specification annexed to said letters patent issued to the said William J. Wilson, and by him surrendered, and reissued to the said The Wilson Packing Company, is incomplete and ambiguous, in this, that the said claim in said letters patent is for an improvement in processes for preserving and packing cooked meat, and is not alleged on what it is an improvement, or in what it consists, or how the said claimed improvement differs from any other mode or process of preserving or packing cooked meats.

And this defendant says that the said alleged invention and discovery, and the same principle, or the substantial or material part thereof, in the said letters patent mentioned in the complainants' bill as issued to the said William J. Wilson on the 31st day of March, A. D. 1874, and reissued to the said The Wilson Packing Company on April 6th, A. D. 1875, reissue No. 6370, was patented by letters patent granted and issued by the British Government in England to the following persons and at the following times:

Patent issued to Peter Durand, bearing date August 25th, 1810, and numbered 3372, for preserving animal and vegetable food.

Patent issued to Ludwig Granholm, bearing date August 5th, 1817, and numbered 4150, and was for preservation of animal and vegetable substances.

Patent issued to Henry Gunter, dated January 4th, 1841, numbered 8776, and was for preserving animal and vegetable substances.

Patent issued to Jean Worthly, dated February 20th, 1855, numbered 375, and was for the improvement in the preservation of meat.

41 All of which said patents will more fully appear by properly authenticated copies of the specifications and drawings of said patent, now found and in the bound volumes of the Library of the United States Patent Office.

And this defendant, further answering, says that the said William J. Wilson was not the original and first inventor and discoverer of the said alleged invention or discovery, or of any material or substantial part, of the thing or of the principal patented in and by said letters patent issued to the said William J. Wilson and reissued to the said The Wilson Packing Company, number of said issue being 6370, as alleged in said bill of complaint, but that the same thing, and the same principle, or substantially the same, was in public use in the United States by the following-named parties and at the following-named places:

J. Winslow Jones, at the city of Portland, in the State of Maine.

Rumsey & Burnham, in the city of Portland, in the State of Maine.

W. E. Lewis & Co., in the city of Portland, in the State of Maine.

A man by the name of Davis, in the city of Portland, and State of Maine.

William Numsen & Sons, in the city of Baltimore, in the State of Maryland.

Kemp, Day & Co., at the city of New York, in the State of New York.

And in use, by all of said parties on the 1st day of January, A. D. 1861, and all prior to the time when it is alleged by complainants that the same was discovered and invented by the said William J.
42 Wilson; that said parties, or the most of them, have continued said using of said principle and process mentioned in said patent, from said year A. D. 1861, to the present time, A. D. 1878.

And this defendant, further answering, admits that the said William C. Marshall did, on the 12th day of July, A. D. 1864, obtain letters patent from the United States for improvement in process and apparatus for preserving meats. And this defendant says that he does not know, except as he is informed by the complainants' said bill of complaint, whether or not the said William C. Marshall did properly make application for said patent, and did comply with all the requirements of law, and have the same issued in due form, and he therefore leaves the complainants to make such proof thereof as they deem fit.

Further answering, this defendant says that he does not know, except as he is informed by the complainants' said bill of complaint, whether or not the said William C. Marshall assigned said alleged patent to the said A. A. Libby, nor whether such alleged assignment was duly recorded in the United States Patent Office. Nor does this defendant know, except from said bill of complaint, whether or not the said William C. Marshall surrendered said alleged patent, nor whether the same was reissued to the said Arthur A. Libby, and he therefore leaves the complainants to prove all of the same as best they may. But this defendant, further answering, says that the said letters patent issued to the said Marshall was not legally and properly reissued to the said Arthur A. Libby, and the same is not a good and valid reissue.

And this defendant says that the said description of the alleged invention as set forth in the specification annexed to the said letters patent issued to the said William C. Marshall, and by him alleged to have been surrendered and reissued to the said Arthur A. Libby, is, as he is informed and believes, and when produced will be found to be, incorrect and ambiguous, in this, that the said claim in said letters patent
43 is for an improvement in process and apparatus for preserving meats, and it is not specified on what it is an improvement, or in what it consists, or how the said claimed improvement differs from any other process or apparatus for preserving meats.

And the said defendant says that the said alleged invention and discovery, and the same principle, or the substantial or material part thereof, in the said letters patent mentioned in the complainants' bill of complaint as issued to the said William C. Marshall on the 12th day of July, A. D. 1864, and reissued to the said Arthur A. Libby on the 25th day of May, A. D. 1875, reissue numbers 6451 and 6452, was patented by letters patent granted and issued by the English Government to the following persons and at the following times:

Patent issued to Peter Durand, bearing date August 25th, 1810, numbered 3472, and was for preserving animal and vegetable food.

Patent issued to Ludwig Granholm, bearing date August 5th, 1817,

numbered 4150, and was for preservation of animal and vegetable substances.

Patent issued to Henry Gunter, dated January 4th, 1841, numbered 8776, and was for preserving animal and vegetable substances.

Patent issued to Jean Worthly, dated February 20th, 1855, numbered 375, and was for the improvement in the preservation of meat.

All of which said patents will more fully appear by properly authenticated copies of the specifications and drawings of said patents, now found and in the bound volumes of the library of the United States Patent Office.

And this defendant, further answering, says that the said William C. Marshall was not the original and first inventor and discoverer of the said alleged invention or discovery, or of any material or substantial part, of the thing or of the principle patented in and by said letters patent issued to the said William C. Marshall, and reissued to the said Arthur A. Libby, said reissue numbers being 6451 and 6452, as alleged in said bill of complaint, but that the same thing, and the same principle, or substantially the same, was in public use in the United States by the following-named parties and at the following-named places:

44

J. Winslow Jones, at the city of Portland, in the State of Maine.

Rumsey & Burnham, at the city of Portland, in the State of Maine.

W. E. Lewis & Co., at the city of Portland, in the State of Maine.

Kehip, Day & Co., in the city of New York, in the State of New York.

William Numsen & Sons, in the city of Baltimore, in the State of Maryland.

And in use by all the said parties on the first day of January, A. D. 1861, and by all prior to the time when it is alleged by the complainants that the same was discovered and invented by the said William C. Marshall, and letters patent obtained by him therefor; that most of said parties have continued said using of said principle mentioned in said patent from said year 1861 to the present time.

And this defendant, further answering, says that the said alleged invention and discovery, or the said principle, or the material part thereof, patented in and by the said letters patent mentioned in the complainant's said bill of complaint as issued to the said William J. Wilson, and reissued to the said The Wilson Packing Company, reissue No. 6370, and in the said patent issued to the said William C. Marshall, and reissued to the said Arthur A. Libby, reissue numbers 6451 and 6452, so far as the last patent relates to the putting up of meat, were mentioned and described in printed publications, that is to say:

45

In "The American Family Encyclopedia of Useful Knowledge, or Book of 7,223 Receipts and Facts," by T. Webster and Mrs. Parkes; edited by D. M. Reese, and published in New York City, by J. C. Duty, in 1856, upon pages 784, 785, and 786 thereof; said book being described on the cover as "Webster's American Encyclopedia."

Also in the "New American Cyclopedia," a dictionary of useful knowledge, published in New York City by D. Appleton & Co., in the year 1861, in vol. 13, on page 589, under the title "Preservation of Food."

Also in the 9th volume of "Encyclopedia Britan'ica," on page 767, under the title "Food;" said book being published in 1855, and generally known and used throughout the United States.

All of which said books were published and in general use and circu-

lation throughout the United States prior to the issuing of said alleged patents to the said William J. Wilson or the said William C. Marshall, and the said reissues thereof.

And this defendant says that he believes it to be true that the said patent reissue No. 7923, dated the 23d day of October, A. D. 1877, to John A. Wilson, is not for the same invention as that issued to the said John A. Wilson on the 6th day of April, A. D. 1875, nor for any distinct and separate part or parts of the thing patented by said original patent, and he says that new matter has been introduced and inserted into the specifications in said reissued patent No. 7923; and he further says that the said reissued patent is not useful.

And this defendant further says that the said patent reissued to the said The Wilson Packing Company, reissue No. 6370, dated
46 April 6th, A. D. 1875, does not cover or is not the invention mentioned in the original patent to the said William J. Wilson on the 31st day of March, A. D. 1874, nor is it for any separate and distinct part or parts of said invention claimed in said original patent. And this defendant says that other new and different matter has been introduced into and inserted in the said specifications.

And this defendant says that as to the second claim of the said reissue patent No. 6370 the said claim is not patentable.

And this defendant says that the said patent reissued to the said Arthur A. Libby, reissue Nos. 6451 and 6452, dated May 25th, 1875, is not for the same invention, claim, and discovery as the patent issued to the said William C. Marshall on the 12th day of July, A. D. 1864, but for an entirely new, separate, and distinct matter, claim, and invention; that the said reissue is not for any separate and distinct part or parts thereof, but that new matter has been inserted and introduced in said specifications in reissues Nos. 6451 and 6452.

And this defendant says that he has no knowledge, except as he is informed by said bill of complaint, as to whether or not the said complainants now own the said patent reissued to said Arthur A. Libby, reissue Nos. 6451 and 6452, nor as to whether the same have been properly assigned to said complainant The Wilson Packing Company as alleged, and he leaves the complainants to prove the same.

And this defendant, further answering, says that the said alleged several improvements and inventions patented by the said John A. Wilson, William J. Wilson, and William C. Marshall, and the said several reissues of said patents as alleged in said complainants' bill, have not heretofore been in the exclusive possession of the said complainants, or any of them, but the same, and each and all of them, have been in the possession and use of the said several parties hereinbefore men-
47 tioned, and in use by the public generally, for a long time prior to the issuing of any of the alleged patents mentioned in the complainants' bill.

And this defendant, further answering, denies that he has infringed any of the alleged patents in said complainants' bill mentioned, or any reissue thereof.

He denies that he has made and vended, and is still making, using, and vending for others to be used, any of the cans mentioned by the complainants in their bill, or any other article or thing whatever as alleged in said complainants' bill.

He denies that he has made large or any gains or profits out of any infringement of the said complainants' patents, or any of them, as alleged by them in their said bill.

And this defendant further, answering, says that he admits that the

said The Wilson Packing Company was organized in May and June, 1874, for the purpose of manufacturing and selling meat put up in a manner as mentioned in said letters patent issued to the said John A. Wilson and William J. Wilson, and that he was one of the original subscribers to the capital stock of said company, and that he became the president of said company, and that he held such office till the spring of 1877.

And, further answering, this defendant denies that he became the owner of a one-quarter (¼) interest of said William J. Wilson patent, as alleged, although he admits he was to have a one-fourth (¼) interest therein. And he denies that he sold the same to the said The Wilson Packing Company, as is alleged by the complainants, as the same was not in his name to sell.

He admits that stock of said The Wilson Packing Company was issued to him and others, but he denies that it was in payment for said patent of said William J. Wilson.

48 And this defendant denies that he, the said defendant, or the said company, paid out any money for the said John A. Wilson patent, in consideration of its conveyance to the said company.

And this defendant says that at about the time of the issuing of said alleged patent to the said William J. Wilson, the said John A. Wilson and William J. Wilson were men of no means whatever, one of them being in bankruptcy, but were experimenting in putting up cooked meat; that, being in want of money, they came to this defendant and desired him to let them have some money to go on with said business; that an agreement was made whereby the defendant was to go in with them and have a share of the profits in said business; that this defendant thereupon put into said business many thousand dollars to start said business; that no money was put in by said Wilsons, or either of them; that many thousand dollars were lost before any profits were realized, all of which was lost by this defendant and his friends interested with him.

And this defendant says that the said patents of the said Wilsons, were never, nor was either of them, considered or treated as of any value whatever, for any purpose; that nothing was paid for them, or either of them; that the value of said stock in said The Wilson Packing Company was only the value of the actual money in said company, and the goods and property it had bought by and with the profits of said business.

And this defendant says that as to the patents of the said Wilsons, and each of them, whether the same, or either, were good or not, he had no knowledge, nor did he ever pretend to have, nor did he ever to the said Wilsons, or either of them, or to any one connected with the said The Wilson Packing Company, say or intimate that the said patents, or either of them, were good.

Further answering, this defendant admits that an arrangement was made between the said The Wilson Packing Company and the said complainants Libby, McNeill & Libby, and he says that the facts in regard to said arrangement are as follows:

49 The said Arthur A. Libby became the owner of the William C. Marshall patent, hereinbefore mentioned, and was claiming that his patent covered the same invention and principle as the said William J. Wilson patent, and was prior to it, and that the firm of Libby, McNeill & Libby were going to putting up meat under it substantially in the same way as the said The Wilson Packing Company were putting meat up under the William J. Wilson patent; the said Arthur A.

Libby claimed that the William J. Wilson patent was good for nothing, and the said Wilsons and this defendant claimed that the said William C. Marshall patent and its alleged reissue to the said Arthur A. Libby were good for nothing. Finally it was agreed by and between all of said parties that they would pool the said patents, and would join hands and all make under all of said patents, and would join in endeavoring to keep out all other parties from making; as it was supposed by most of said parties that neither patent was good for anything as a patent. An agreement was made in writing betweed said The Wilson Packing Company and said Libby, McNeill & Libby, substantially embodying the above facts.

And, further answering, this defendant denies that any of the capital stock of said The Wilson Packing Company was invested in said patents, or any of them, and he admits that the money of said company was put into buildings and machinery, etc., but says that the value of the same did not depend in any measure on said patents, but on the business management of said company, and how long the public would believe the patents were good and valid and by such belief keep away honest competition.

And this defendant says that at the formation of said The Wilson Packing Company all the stock of said company was owned by this defendant, and his friends, and the said two Wilsons, no one else having any interest therein whatever. That at the time he (this defendant) sold out his interest in said company, in the spring of 1877, his friends also sold out their interest in said company, but did not sell their
50 stock, but surrendered and gave up the same to the said Wilsons. And that no person except the said two Wilsons and this defendant and his friends had then, or ever had, any interest in said The Wilson Packing Company, from its formation up to the date of the filing of the bill of complaint herein.

And, further answering, this defendant denies that the said stock of said The Wilson Packing Company was of any value except by reason of what money this defendant and his friends had invested in the business of said company and the profits arising therefrom, nor was it ever worth any more, to the knowledge of this defendant.

And this defendant denies that he sold said stock, in the meaning of that term, but says that he, becoming dissatisfied with the management of said Wilsons in said company, *he* determined to leave said company, and that in doing so, all that he received was the actual amount of money he had invested, and his share of the profits of said business, less what he had previously received from said business. That he did not sell or dispose of his stock in said company, but delivered the same up to the said Wilsons without any compensation whatever therefor, he not considering the same worth anything in itself. That in making said settlement with the said Wilsons, no reference was made as to said stock, but only the money invested and the profits were considered.

And, further answering, this defendant admits that he received a salary from said company, as did also the Wilsons.

And this defendant admits that he became familiar with all the business of said company, as in fact he attended to the selling of said meats, and the profits of said business were in a great measure due to his labor and services.

And, further answering, this defendant denies that the said complainants alone have the exclusive right to use said patents, for he says that the said William C. Marshall has reserved to himself
51 the sole right to the State of New York in and to said Marshall

patent and its reissues, and that he now, and always has, owned the same.

And, further answering, this defendant admits that the complainant The Wilson Packing Company, has been exclusively engaged in said business of putting up meats under said alleged patents, and he alleges that other parties have done the same thing, for not only two, but many years prior to the time of the complainants' doing so, in the United States and elsewhere.

And this defendant denies that he has, as alleged, deprived them of any profits which they would but for his acts have realized.

And this defendant denies that he is estopped from questioning the validity of the said patents, or either of them, by reason of anything he has done in the premises.

And this defendant, admits that he does claim that the said patents are not good, and are invalid in law, and that he is not bound by them.

And this defendant, further answering, denies that he has ever conspired to injure the complainants, or either of them, or to deprive them, or either of them, of any profits, benefits, and advantage rightfully belonging to them, or either of them. And he denies that he has made, used, and vended, or is still making, using, or vending to others to be used, cans and canned meat, as alleged by said complainants in their said bill, and that he has not, and does not in any way, infringe any lawful patent owned or possessed by said complainants, or any of them.

And the said defendant, further answering, denies that the said complainants are entitled to the relief, or any part thereof, in the said complaint demanded. And this defendant prays the same ad-
52 *ad*vantage of his aforesaid answer as if he had pleaded or demurred to said bill of complaint.

And this defendant prays leave to be hence dismissed, with his reasonable costs and charges in this behalf most wrongfully sustained.

WILLIAM B. CLAPP,
By ELDRIDGE & TOURTELLOTTE,
His Solicitors.

ELDRIDGE & TOURTELLOTTE,
Solicitors and Counsel for Defendant.

(Endorsed.) Filed February 25th, 1878. W. H. Bradley, *clerk.*

53 Afterwards, to wit, on the 13th day of March, A. D. 1878, said complainant', by their solicitors, filed in said clerk's office their replication to the answer of said defendants in said-entitled cause; which said replication is in the words and figures following, to wit:

Replication.

In the circuit court of the United States for the northern district of Illinois.

THE WILSON PACKING COMPANY, ARTHUR A. LIBBY, Archibald McNeill, and Charles P. Libby,	In equity.
v.	
WILLIAM B. CLAPP.	

The replication of The Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby to the answer of William B. Clapp, defendant.

The repliants, saving, and reserving to themselves all and all manner

of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto saith that they will aver and prove their said bill to be true, certain, and sufficient in the law to be answered unto; and that the said answer of the defendant is uncertain, untrue, and insufficient to be replied unto by these repliants; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true; all which matters and
54 things these repliants are and will be ready to aver and prove as this honorable court shall direct, and humbly pray as in and by their said bill they have already prayed.

MUNDAY AND EVARTS,
Sol's for Compl'ts.

(Endorsed.) Filed March 13, 1878. Wm. H. Bradley, cl'k.

On the same day, to wit, the 13th day of March, A. D. 1878, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY
v.
WILLIAM B. CLAPP. } In chancery.

On motion of complainant's solicitors it is ordered by the court that Robert P. Harlow, esq., of New York City, be and he hereby is appointed a special examiner to take proofs herein and report the same to the court.

Afterwards, to wit, on the 14th day of June, A. D. 1878, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

WILSON PACKING COMPANY
v.
55 WILLIAM B. CLAPP. } In chancery.

On motion, and as per stipulation filed, the time for taking proof herein is extended to the first day of September next.

Afterwards, to wit, on the 1st day of August, A. D. 1878, said defendant, by his attorneys, filed in said clerk's office his amended answer in said-entitled cause; which said answer is in the words and figures following, to wit:

Amended answer.

Circuit court of the United States for the northern district of Illinois.

WILSON PACKING COMPANY ET AL.
v.
WILLIAM B. CLAPP. } In chancery.

Now comes the said defendant and, by leave of the court first had and obtained, amends his answer herein by inserting in said answer

after each list of English letters patent in said answer set up as anticipating the letters patent sued upon, and each time said list is given in said answer, the following additional English letters patent, to wit:

Patent issued to John Wertheimer, dated Sept. 8th, 1841, numbered 8874, and was for preserving animal and vegetable substances and liquids; and

Patent issued to Jules Jean Baptiste Sylvian Martin de Lig-
56 niac, dated October 14th, 1855, and was for an improved mode of preserving animal substances.

Also, by inserting in said answer, after each list of persons alleged to have had knowledge of or to have used the several alleged inventions described in the letters patent sued upon, the following additional names, to wit:

William Underwood and Son, in the city of Boston, in the State of Massachusetts;

Gail Borden Meat Preserving Company, in the town or city of Borden, in the State of Texas; and

William Archdeacon, in the city of Chicago, Cook County, Illinois, and in the town of Crystal Lake, McHenry County, Illinois.

WILLIAM B. CLAPP,
By ELDRIDGE AND TOURTELOTTE,
His Sol'rs.

The amendment above referred to having been lost or mislaid, the above, which is a copy thereof, may be filed as of August 1, 1878.

ELDRIDGE AND TOURTELOTTE,
Def'ts Sol'rs.
MUNDAY AND EVARTS,
Compl't's Sol'rs.

(Endorsed:) Filed Aug. 1, 1878. Wm. H. Bradley, cl'k.

57 Afterwards, to wit, on the 26th day of August, A. D. 1878, the following stipulation was filed in said clerk's office in said-entitled cause, to wit:

Stipulation.

Circuit court of the United States for the northern district of Illinois.

WILSON PACKING COMPANY ET AL.
v.
WILLIAM B. CLAPP. } In equity.

It is hereby stipulated that the Marshall reissued letters patent No. 6451, being one of the patents sued on in this cause, was, with the exception of the right thereunder within the State of New York, conveyed by Arthur A. Libby to The Wilson Packing Company by an instrument in writing duly executed and recorded in the Patent Office prior to the acts of alleged infringement complained of in the bill of complaint herein. Also, that by the terms of the same instrument the complainants Arthur A. Libby, Archibald McNeill, and Charles P. Libby are made jointly interested with the said Wilson Packing Company in all sums which may be recovered from the defendant in this cause for the infringement of the letters patent sued on or any of said letters patent.

This stipulation may be offered and read at the hearing as evidence

of the matters therein stated in lieu of said instrument of writing, which has heretofore been offered in evidence before the exam-
58 iner, and made an exhibit under the name of the "Wilson Packing Co. and Libby Agreement," the further production of said instrument and the incorporating of the same in the record being hereby waived.

This stipulation is made at the request of the complainants and on their behalf.

ELDRIDGE AND TOURTELOTTE,
Def't's Sol'rs.

AUGUST 26, 1878.

(Endorsed:) Filed August 26, 1878. Wm. H. Bradley, cl'k.

Afterwards, to wit, on the 11th day of November, A. D. 1878, in the record of the proceedings of said court in said-entitled cause, before the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

WILSON PACKING COMPANY
v.
WILLIAM B. CLAPP. } In chancery.

On motion, the time for defendant to close proofs herein is extended to January first, A. D. 1879.

Afterwards, to wit, on the 16th day of June, A. D. 1879, the following stipulation was filed in said clerk's office in said-entitled cause, to wit:

Stipulation.

In the circuit court of the United States for the northern district
59 of Illinois, of the May term, A. D. 1879, in chancery.

THE WILSON PACKING COMPANY AND ARTHUR A. LIBBY ET AL.
v.
WILLIAM B. CLAPP. } Bill.

The claim of estoppel made against the defendant by the bill and proofs in the above-entitled cause is hereby expressly waived, and said cause shall be heard, considered, and determined as though no such claim had been made.

Chicago, June 16th, 1879.

MUNDAY AND EVARTS,
Sol'rs for Compl'ts.

(Endorsed:) Filed June 16, 1879. Wm. H. Bradley, cl'k.

Afterwards, to wit, on the 5th day of July, A. D. 1879, in the record of the proceedings of said court in said-entitled cause, before the Hon. Thomas Drummond, judge, and the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

It is ordered by the court that the certificate of division of opinion this day filed in the following entitled cause be spread upon the records of this court, and the same is in the words and figures following, to wit:

Circuit court of the United States, northern district of Illinois.

THE WILSON PACKING COMPANY AND OTHERS
vs.
WILLIAM B. CLAPP.

60 At the circuit court of the United States, held at Chicago, in the northern district of Illinois, on the fifth day of July, 1879, being present Thomas Drummond, circuit judge, and Henry W. Blodgett, district judge, the case of The Wilson Packing Company and others vs. William B. Clapp being submitted to the court by agreement of the parties, all questions arising upon the pleadings, exhibits, and proofs, and otherwise upon the record, were found by the court in favor of the plaintiffs, and objection to such finding was expressly waived, except those questions which related to the patentability of the subject-matter of certain patents named in the pleadings under which the plaintiffs claimed the right to recover; the plaintiffs having waived, by stipulation on file, any claim of estoppel made against the defendant by the bill and proofs in the cause; and, upon a hearing by the court, and after argument by the counsel of the respective parties, the following occurred as questions:

First. Whether the first claim of the reissued patent No. 6451, and dated May 25, 1875, to W. C. Marshall, and named in the pleadings, was a valid claim sustainable in law.

Second. Whether the claims in the reissued patent No. 6370, dated April 6, 1875, to William J. Wilson, and named in the pleadings, were valid and sustainable in law.

61 Third. Whether the first and third claim in the reissued patent No. 7923, dated October 23, 1877, and issued to John A. Wilson and named in the pleadings, were valid and sustainable in law.

Upon which questions the opinions of the judges were opposed. Whereupon, on motion of the plaintiffs, by their counsel, that the points on which the disagreement has happened may, during the term, be stated under the direction of the judges, and certified under the seal of the court to the Supreme Court, to be finally decided, it is ordered that the foregoing questions under the pleadings, exhibits, and proofs in the cause be certified according to the request of the plaintiffs, by their counsel, to the Supreme Court of the United States.

It was admitted and agreed by the counsel of the parties respectively that no claim was made and no right to recover insisted upon in this case under the second claim in the patent to W. C. Marshall, before mentioned; and it was also agreed that no claim was made or right to recover insisted upon by the plaintiffs under the second claim of the reissued patent to John A. Wilson, above referred to.

THOMAS DRUMMOND.
H. W. BLODGETT.

(Endorsed:) Filed July 5, 1879. Wm. H. Bradley, clerk.

62 And on the same day, to wit, the 5th day of July, A. D. 1879, in the record of the proceedings of said court in said-entitled cause, before the Hon. Thomas Drummond, judge, and the Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

THE WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
v.
WILLIAM B. CLAPP. } In chancery.

This cause having been heretofore submitted to the court on the pleadings, exhibits, and proofs, and arguments of the respective counsel, and the court being now sufficiently advised finds the equity of the case with the defendant, in conformity with the opinion of the circuit judge, and orders the bill herein to be dismissed at the costs of complainants. It is thereupon considered, adjudged, and decreed by the court that this cause be dismissed, and that the defendant do have and recover of and from the complainants his costs and charges about his defence in his behalf expended, amounting to the sum of one hundred and seventy dollars, and that execution issue therefor.

And the complainants thereupon come and pray an appeal to the Supreme Court of the United States, which is allowed upon their giving security according to law, subject to the approval of the court.

63 And on the same day, to wit, the 5th day of July, A. D. 1879, the said complainants, by their solicitors, filed in said clerk's office their certificate of evidence in said-entitled cause; which said certificate of evidence is in the words and figures following, to wit:

Certificate of evidence.

U. S. circuit court, northern district of Illinois.

WILSON PACKING CO. ET AL.
v.
WILLIAM B. CLAPP. } Certificate of evidence. In equity.

It is hereby certified that the evidence contained in the printed pamphlets attached, entitled, respectively, "Complainants' Record," "Defendant's Depositions and Exhibits," and "Complainants' Exhibits to Deposition of William Archdeacon."

Also, English letters patent to John Wertheimer, No. 8874, A. D. 1841;

Also, English letters patent to Ludwig Granholm, No. 4150, A. D. 1817;

Also, English letters patent to Jean Worthly, A. D. 1855,

were presented to and considered by the court at the hearing of the above-entitled cause, and no other evidence was offered or considered, except the canned-meat exhibits produced at the hearing.

64 THOMAS DRUMMOND.

65 *Exhibit W. J. Wilson Patent.*

Reissue No. 6370.

The United States of America to all to whom these presents shall come:

Whereas William J. Wilson, of Chicago, Illinois, assignor by mesne assignments to the Wilson Packing Company, has presented to the Commissioner of Patents a petition praying for the reissue of letters patent for an alleged new and useful improvement in processes for pre-

serving and packing cooked meats (for which letters patent were issued to him dated March 31, 1874, which letters having been surrendered the same have been canceled and new letters ordered to issue to said assignee on an amended specification), a description of which invention is contained in the specification, of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such cases made and provided; and whereas, upon due examination made, the said claimant is adjudged to be justly entitled to a patent under the law: Now, therefore, these letters
66 patent are to grant unto the said Wilson Packing Company, its successors or assigns, for the term of seventeen years from the thirty-first day of March, one thousand eight hundred and seventy-four, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this sixth day of April, in the year of our Lord one thousand eight hundred and seventy-five, and of the Independence of the United States of America the ninety-ninth.

(SEAL PATENT OFFICE UNITED STATES OF AMERICA.)

C. DELANO,
Secretary of the Interior.

Countersigned:

J. M. THACHER,
Commissioner of Patents.

67 UNITED STATES PATENT OFFICE.

William J. Wilson, of Chicago, Ill., assignor by mesne assignments to the Wilson Packing Company. Improvement in processes for preserving and packing cooked meats. Specification forming part of letters patent No. 149276, dated March 31, 1874; reissue No. 6370, dated April 6, 1875; application filed April 2, 1875.

To all whom it may concern:

Be it known that I, Wm. J. Wilson, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in process of preserving and packing cooked meats; and I do hereby declare that the following is a full, clear, and exact description thereof:

The nature of my invention consists in a process of packing cooked meats for transportation in a compressed form into an air-tight package, so as to preserve the meat in its integrity and retain all the natural juices and nutritious qualities of the meat.

In carrying out my invention, the meat is first cooked thoroughly at a temperature of 212° Fahrenheit, so that all the bone and gristle can be removed and the meat yet retain its natural grain and integrity. The meat is then in proper condition for eating, and is wholesome and palatable. A measured quantity of this cooked meat is then preferably, while yet warm with cooking, pressed by any suitable apparatus into a previously-prepared box or case with sufficient force to remove the air and all superfluous moisture, and make the meat form a solid cake. The box or case is then closed air-tight upon the meat.
68 The meat is thus packed and compressed in its natural state—that is, without disintegration or desiccation—and it retains all

the juices and nutritious qualities of the meat, the compression only removing the superfluous moisture.

The meat thus put up is available at all times, even when cooking is impracticable, as it is already cooked before it is packed. It is more economical, as it is compressed and reduced in weight one-half from the uncooked weight, being free from bone and gristle and put up in a compact portable shape for transportation, rendering the usual expensive cooperage unnecessary. Besides, there is a great saving in cost of transportation.

A barrel containing two hundred pounds uncooked meat weighs, gross, three hundred and twenty pounds—meat, salt, brine, and barrel—while by my process it would weigh only one hundred and ten pounds gross, making a saving in cost of freight alone of nearly two-thirds.

The box or case may be made of wood or metal, or both combined, of any suitable form or shape, and of any desired dimensions.

Having thus fully described my invention, what I claim as new, and desire to secure by letters patent, is—

1. The within-described process for packing cooked meats for transportation by compressing the same into an air-tight package, so as to preserve the meat in its integrity and retain all the natural juices and nutritious qualities of the meat, substantially as set forth.

2. As a new article of merchandise, cooked meat put up in solid form, in its natural state, without disintegration or desiccation, in hermetically sealed packages, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of March, 1875.

WILLIAM J. WILSON.

Witnesses:

HENRY P. FULTON.

J. MCDOWELL.

69 *Exhibit J. A. Wilson Patent.*

Reissue No. 7923.

The United States of America to all to whom these presests shall come:

Whereas John A. Wilson, of Chicago, Illinois, has presented to the Commissioner of Patents a petition praying for the reissue of letters patent for an alleged new and useful improvement in sheet-metal cans, for which letters patent were issued to him dated April 6, 1875, which letters having been surrendered, the same have been canceled and new letters ordered to issue to him on an amended specification, a description of which invention is contained in the specification of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such cases made and provided; and whereas upon due examination made the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said John A. Wilson, his heirs or assigns, for the term of seventeen years from the sixth day of April, one thousand eight hundred and seventy-five, the exclusive right to make, use, and vend the said invention
70 throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this

twenty-third day of October, in the year of our Lord one thousand eight hundred and seventy-seven, and of the Independence of the United States of America the one hundred and second.

SEAL PATENT OFFICE UNITED STATES OF AMERICA.

A. BELL,
Acting Secretary of the Interior.

Countersigned:

ELLIS SPEAR,
Commissioner of Patents.

71 UNITED STATES PATENT OFFICE.

John A. Wilson, of Chicago, Illinois. Improvement in sheet-metal cans. Specification forming part of letters patent No. 161848, dated April 6, 1875; reissue No. 7923, dated October 23, 1877; application filed October 15, 1877.

To all whom it may concern:

Be it known that I, John A. Wilson, of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful improvements in metallic cans for containing cooked meats; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification:

My invention relates to hermetically-sealed cans used in packing meats or other articles; and it consists in a pyramidal-shaped can, having rounded corners, and both ends slightly flaring to form shoulders, against which the head or end pieces rest, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

(Here follows diagram marked page 72.)

Figure 1 is a perspective view of my can. Fig. 2 is a transverse vertical section of the same, reversed.

a represents the body of my can, made in the form of a truncated pyramid, with rounded corners, and of any desired number of sides, though I prefer to make with four sides. Both ends of the body are made slightly flaring, as shown, so as to form interior shoulders or offsets *a*, against which the heads B and C are to rest. The edges
73 of these heads are turned outward, as shown at *b*, and the flaring edge *d* of the end of the can is turned inward over the flange *b*, and the three thicknesses of metal pressed together by machinery, with or without solder, so as to make air-tight joints.

In packing cooked meats, it is done by means of a plunger through an aperture in the large head B, which opening is afterwards hermetically sealed by means of a cap or plate, D. In the plate D is a vent or opening, *i*, to allow the air or gases to escape that are generated while hermetically sealing the can; and to prevent the meat from closing said vent, it is protected by means of a trough or gutter, *h*, attached to the under side of the plate, which trough is open at both ends; or, in place of this trough, a perforated diaphragm may be used to answer the same

twenty-third day of October, in the year of our Lord one thousand eight hundred and seventy-seven, and of the Independence of the United States of America the one hundred and second.

SEAL PATENT OFFICE UNITED STATES OF AMERICA.

A. BELL,
Acting Secretary of the Interior.

Countersigned:

ELLIS SPEAR,
Commissioner of Patents.

71 UNITED STATES PATENT OFFICE.

John A. Wilson, of Chicago, Illinois. Improvement in sheet-metal cans. Specification forming part of letters patent No. 161848, dated April 6, 1875; reissue No. 7923, dated October 23, 1877; application filed October 15, 1877.

To all whom it may concern:

Be it known that I, John A. Wilson, of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful improvements in metallic cans for containing cooked meats; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification:

My invention relates to hermetically-sealed cans used in packing meats or other articles; and it consists in a pyramidal-shaped can, having rounded corners, and both ends slightly flaring to form shoulders, against which the head or end pieces rest, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

(Here follows diagram marked page 72.)

Figure 1 is a perspective view of my can. Fig. 2 is a transverse vertical section of the same, reversed.

a represents the body of my can, made in the form of a truncated pyramid, with rounded corners, and of any desired number of sides, though I prefer to make with four sides. Both ends of the body are made slightly flaring, as shown, so as to form interior shoulders or offsets *a*, against which the heads B and C are to rest. The edges
73 of these heads are turned outward, as shown at *b*, and the flaring edge *d* of the end of the can is turned inward over the flange *b*, and the three thicknesses of metal pressed together by machinery, with or without solder, so as to make air-tight joints.

In packing cooked meats, it is done by means of a plunger through an aperture in the large head B, which opening is afterwards hermetically sealed by means of a cap or plate, D. In the plate D is a vent or opening, *i*, to allow the air or gases to escape that are generated while hermetically sealing the can; and to prevent the meat from closing said vent, it is protected by means of a trough or gutter, *h*, attached to the under side of the plate, which trough is open at both ends; or, in place of this trough, a perforated diaphragm may be used to answer the same

purpose. The can is to be opened at the larger end, at or near the shoulder *a*, by means of a suitable can-opener, so that when the can is reversed again a slight tap on the smaller head C will cause the solidly-packed meat to slide out in one piece, so as to be readily sliced as desired.

Having thus fully described my invention, what I claim as new, and desire to secure by letters patent, is—

1. A can for packing food, hermetically sealed, and constructed of pyramidal form, with rounded corners and offset ends to support the heads, said head being secured as shown and described.

2. The perforated plate D, in combination with head B or C, provided with protector *h*, substantially as and for the purpose set forth.

3. As an improved article of manufacture, solid meat compressed and secured with a pyramidal case or can, so that said can forms a mold for the meat and permits its discharge as a solid cake, substantially as specified.

JOHN A. WILSON.

Witnesses:
EDWARD S. EVARTS.
FORDE R. SMITH.

74 *Exhibit William C. Marshall Patent.*

Reissue No. 6451.

The United States of America to all to whom these presents shall come:

Whereas William C. Marshall, of New York, New York, assignor to Arthur A. Libby, of Chicago, Illinois, has presented to the Commissioner of Patents a petition praying for the reissue of letters patent for an alleged new and useful improvement in processes for preserving meats (for which letters patent were issued to him dated July 12, 1864, which letters having been surrendered the same have been canceled and new letters ordered to issue to said assignee on two separate amended specifications), a description of which invention is contained in the specification of which a copy is hereto annexed and made a part hereof, and has complied with the various requirements of law in such cases made and provided; and whereas, upon due examination made, the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said Arthur A. Libby, his heirs or assigns, for the term of seventeen years
75 from the twelfth day of July, one thousand eight hundred and sixty-four the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In testimony whereof, I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington this twenty-fifth day of May, in the year of our Lord one thousand eight hundred and seventy-five, and of the Independence of the United States of America the ninety-ninth.

{ SEAL PATENT OFFICE UNITED STATES OF AMERICA. }

B. R. COWEN,
Acting Secretary of the Interior.

Countersigned:

J. M. THACHER,
Commissioner of Patents.

76 *Exhibit Marshall Patent.*

UNITED STATES PATENT OFFICE.

William C. Marshall, of N. Y., assignor to Arthur A. Libby, of Chicago, Illinois. Improvement in processes for preserving meats. Specification forming part of letters patent No. 43516, dated July 12, 1864; reissue No. 6451, dated May 25, 1875. Application filed May 19, 1875. Division A.

To all whom it may concern:

Be it known that I, W. C. Marshall, of the city, county, and State of New York, have invented a new and improved process for preserving meats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to carry out and use the same:

This part of my invention consists in exposing the meat to be preserved, after it has been subjected to a partial preserving process, and before it is put up in packages or boxes, to a heavy pressure, by any suitable means or apparatus, in such a manner that a large percentage of the water, and a large part of the air contained between the various pieces and in the pores of the meat are expelled before the meat is put up in packages, by which means the principal agents of putrefaction are removed and the bulk considerably reduced.

Any desired quantity of meat may be compressed to agree
77 with the size of the packages, and such compressed meat, being non-elastic, readily retains its bulk in solid form, and can the sily be forced, by any desirable pressure, into the package without exposing the latter to any undue strain or pressure.

The ordinary method of preserving meat for commercial purposes is, substantially, as follows: The meat, being first subjected to the action of salt and saltpeter in the form of brine, until the water of the meat is saturated, is then removed from the brine and placed in packages of wood, with an entirely new solution of salt and saltpeter. This process is known to be destructive of all or nearly all, the nutritious values of the meat in a very short space of time.

My process is as follows: After rendering the water of the meat, which is the chief agent in destruction, temporarily proof against putrefaction by any of the ordinary processes by which I remove a large percentage of the water, the remainder being charged with the concentrated antiseptics, I then subject a given quantity of the meat to pressure in a suitable mold, and subsequently into the packages or boxes intended to contain the same, until the air is driven out and the space occupied by the meat agrees with the size of the package or box it is intended to fill. When the compressed meat is in its place, the package or box is hermetically sealed, the air remaining in the same being expelled by the usual process in canning. In this state, retaining all its nutritious qualities, the meat will remain perfect as long as the package remains intact.

The advantages of this process are, first, that the natural values of the meat are not destroyed by the means of protecting it from putrefaction, as is unavoidable in the ordinary process; second, that only about one-half the space and weight ordinarily required is necessary by this mode for the same quantity of meat.

Having thus fully described my invention, what I claim as new, and desire to secure by letters patent, is—

78 1. The process herein described for packing and preserving meats, the same consisting in subjecting the meat, after it has been exposed to preserving processes, as described, to a heavy pressure and packing, and hermetically sealing the so compressed meat in packages or boxes, substantially as and for the purpose herein set forth.

2. As a new article of manufacture, the above-described compressed meat, preserved in solid form, without disintegration or desiccation, in hermetically-sealed packages, substantially as herein set forth.

W. C. MARSHALL.

Witnesses:
E. N. HORSFORD.
J. VAN SANTVOORD.

Exhibit W. J. Wilson Patent Deed.

Whereas William J. Wilson, of Chicago, in the county of Cook and State of Illinois, did obtain letters patent of the United States, No. 149276, for a certain process for curing and packing meats, which letters patent bear date the 31st day of March, eighteen hundred and seventy-four; and whereas said Wilson has assigned three-quarters thereof, to wit, one-quarter to each of Wm. B. Clapp, J. A. Wilson, and D. A. Loring; and whereas the Wilson Packing Company is desirous of acquiring an interest therein:

Now, therefore, this indenture witnesseth, that for and in consideration of the sum of one hundred thousand dollars, to them in hand paid, the receipt whereof is hereby acknowledged, they, the said W. J. Wilson, John A. Wilson, Daniel A. Loring, and William B. Clapp, have granted, sold, and set over to the said Wilson Packing Company
79 all the right, title, and interest which they have in the said invention, as secured to them by said letters patent for, to, and in the United States of America, and in no other place or places, the same to be held and enjoyed by the said Wilson Packing Company for its own use and behoof, and for the use and behoof of its successors legal representatives, to the full end of the term for which said letters patent are granted, as fully and entirely as the same would have been held and enjoyed by them had this grant and sale not been made.

In testimony whereof we hereunto set our hand' and affix our seals this day of , A. D. 187 .

WILLIAM J. WILSON. [SEAL.]
D. A. LORING. [SEAL.]
J. A. WILSON. [SEAL.]
W. B. CLAPP. [SEAL.]

Sealed and delivered in presence of—

Received for record, June 29, 1874, and recorded in liber E 18, page 99, of Transfers of Patents.

In testimony whereof I have caused the seal of the Patent Office to be hereunto affixed.

[SEAL.]

J. M. THACHER,
Acting Commissioner.

Exhibit J. A. Wilson, Deed.

Whereas I, John A. Wilson, of Chicago, State of Illinois, d d obtain letters patent of the United States, No. 161848, for certain new and use-

ful improvements in metallic cans for containing cooked meats, which letters patent bear date the 6th day of April, eighteen hundred and seventy-five; and whereas the Wilson Packing Company, a corporation created and existing under and by virtue of the laws of the State of Illinois, is desirous of purchasing said invention: Now, therefore, be it known that for and in consideration of one dollar to me paid,
80 the receipt whereof is hereby acknowledged, I have sold, assigned and set over unto the Wilson Packing Company all my right, title, and interest in said invention, as secured to me by said letters patent, the same to be held and enjoyed by the said corporation, its successors and assigns, for the full term for which said letters patent are granted.

In testimony whereof I have hereunto set my hand and affixed my seal, this 6th day of April, A. D. 1875.

J. A. WILSON. [SEAL.]

Sealed and delivered in presence of—
W. J. WILSON.

Received for record, December 10th, 1877, and recorded in liber G 22, page 340, of Transfers of Patents.

In testimony whereof I have caused the seal of the Patent Office to be hereunto affixed.

[SEAL.]

W. H. DOOLITTLE,
Per P. E. W.,
Acting Commissioner.

81 *Stipulation.*

Circuit court of the United States for the northern district of Illinois.

WILSON PACKING COMPANY ET AL.
vs.
WILLIAM B. CLAPP. } In equity.

It is hereby stipulated that the Marshall reissue letters patent, No. 6451, being one of the patents sued on in this cause, was, with the exception of the right thereunder within the State of New York, conveyed by Arthur A. Libby to the Wilson Packing Company, by an instrument in writing, duly executed and recorded in the Patent Office prior to the acts of alleged infringement complained of in the bill of complainant herein. Also, that by the terms of the same instrument the complainants Arthur A. Libby, Archibald McNeill, and Charles P. Libby are made jointly interested with the said Wilson Packing Company in all sums which may be recovered from the defendant in this cause, for the infringement of the letters patent sued on, or any of said letters patent.

This stipulation may be offered and read at the hearing, as evidence of the matters therein stated, in lieu of said instrument of writing which has heretofore been offered in evidence before the examiner, and made an exhibit under the name of the "Wilson Packing Co. and Libby Agreement," the further production of said instrument and the incorporating of the same in the record being hereby waived.

This stipulation is made at the request of the complainants, and on their behalf.

August 26, 1878.

ELDRIDGE & TOURTELLOTTE,
Defendant's Solicitors.

82 DEPOSITION.

Deposition of William Bogle.

WILLIAM BOGLE, one of the witnesses called by the complainant, being duly sworn, in answer to interrogatories, testified as follows:

Q. What is your name, age, residence, and occupation?

A. William Bogle; age, twenty-two; occupation, clerk; and reside in Montclair, New Jersey; I am in the employ of Bogle & Lyles, of New York City, No. 87 and 89 Park Place.

Q. Do you know the defendant, William B. Clapp?

A. I do not.

Q. Do you know his place of business, No. 157 Chambers street?

A. I know that to be his place of business.

Q. Did you ever purchase any canned corned beef of William B. Clapp?

A. I purchased three cases of canned corned beef on the 16th of November, 1877, on order of concern for Bogle & Lyles.

Q. Have you a bill of that purchase or invoice?

A. I have.

(Witness hands in the bill, which is offered in evidence, and marked "Complainant's Exhibit A.")

Q. What did you do with the three cases of canned corned beef mentioned in the invoice Exhibit A?

A. I sold them to W. P. Pennell.

Q. What was the date of this purchase?

A. November 16th, 1877.

WILLIAM BOGLE.

Sworn and subscribed to before me this 19th day of March, 1878.

R. P. HARLOW,
Special Examiner.

83 EXHIBIT A.

Illustration of a can of Meat, upon which appears the following

W. B. CLAPP,
Gen'l Agt.,
157 CHAMBERS ST.
New York.

The St. Louis Beef Canning Co.
ST. LOUIS, MO.

R. D. Hunter, *Pres*
H. B. Merrill, *Sec'y*
H. L. Newman, *Tr.*

For Family use, S a Voyages, Parties, Excursions, etc.

Choicest Canned Meats in the Market, Cooked Ready for Use.

Address all orders and letters to 157 Chambers St. New York.

No allowance made on damaged goods. Hold same subject to our order.

New York, Nov. 16, 1877.

MESSRS. BOGLE & LYLES,

Bought of W. B. CLAPP,

THE CANNED MEATS OF THE ST. LOUIS BEEF CANNING CO.

Terms..... 157 CHAMBERS ST., N. Y.

Marks.	Cases.	Description.	Size.	No. cans in case.	Price per case.	$ cts.
	3	Corned Beef	2 lb	12	4 50	13 50
		Dis. 10 & 1¼ %				1 53
						11 97

Received payment,
W. B. CLAPP,
TERRY.

Deposition of William P. Pennell.

WILLIAM P. PENNELL, a witness called for the complainants, being duly sworn, in answer to interrogatories, says:

Q. What is your name, age, residence, and occupation?

A. William P. Pennell; aged thirty-four, and reside in the city of New York. I am employed in the Wilson Packing Company as salesman in their New York office.

Q. Did you ever purchase any canned corn beef of Messrs. Bogle & Lyles?

A. Yes, sir; I bought from them three cases, that was three dozen; the goods were packed by the St. Louis Beef Canning Company, of St. Louis.

84 Q. Do you know from whom Bogle & Lyles purchased the three cases of which you speak?

A. Yes, I know them to be bought from W. B. Clapp, 157 Chambers street, New York.

Q. What did you do with those three cases?

A. Shipped them by express to the Wilson Packing Company, of Chicago.

Q. About when?

A. November 16, 1878 [1877].

Q. The day you purchased them from Bogle & Lyles?

A. Yes, sir.

Q. Do you know who was doing business at 157 Chambers street?

A. I know that W. B. Clapp was doing the business at that time. The business was conducted under the name of W. B. Clapp.

Q. What did W. B. Clapp, at that time, sell at 157 Chambers street?

A. Compressed corned beef in hermetically sealed tin cans.

Q. By whom manufactured, if you know?

A. St. Louis Beef Canning Company, of St. Louis.

Q. Please look at the engraving of the can upon the invoice, Complainant's Exhibit A, and state whether it represents the article sold by Clapp at 157 Chambers street.

A. It is an exact fac-simile of the goods sold by W. B. Clapp at that time.

WILLIAM P. PENNELL.

Subscribed and sworn to before me this 19th day of March, 1878.
ROBT. P. HARLOW,
Special Examiner.

85 *Deposition of Henry F. Billings.*

Q. What is your name, age, residence, and occupation?

A. My name is Henry F. Billings; age, thirty-two years; residence Chicago, and occupation, I am the cashier of the Wilson Packing Company.

Q. Please look at the case containing a dozen cans of the St. Louis Beef Canning Company's canned meats, and state when and where you first saw it, and under what circumstances.

A. It came here to the Wilson Packing Company by express on the 19th day of November, 1877, shipped to us by our New York office, W. P. Pennell manager. It is one of three cases purchased by Messrs. Bogle & Lyles, as I understand. I received the box and paid the express charges on it. I know the box.

Q. Where has the box been since you received it up to this date?

A. In our office.

Q. Is the box in the same condition as it was when received by you?

A. The same, except it was nailed up then.

Q. Were these cuts and advertisements in it?

A. Yes, sir.

(The said box and contents is here offered in evidence by complainant's counsel, and the same is marked "Complainant's Exhibit One Dozen Canned Meat.")

Cross-examination:

Q. How long have you been employed by the Wilson Packing Company?

A. Over three years.

Q. In what capacity have you been employed during that time?

A. Book-keeper, cashier, and attending to details generally.

86 Q. In what capacity were you employed at the time you say you received this box "Exhibit One Dozen Canned Meat?"

A. Cashier.

Q. Where did you first see the box?

A. In our office.

Q. Did you see the box when it was brought there, or after it had been brought there?

A. I saw it when the expressman brought it in.

Q. Did you open the box at that time, or see it opened?

A. I saw it opened.

Q. Did you examine any of the contents of it by taking out any of the cans at that time?

A. I did.

Q. Do you know of your own knowledge where that box came from?

A. I do, as much as any shipment we ever receive of anything. Of course I did not see it shipped.

Q. Had you ever seen the box before you saw it at the office of the Wilson Packing Company, in your life?

A. I cannot say positively that I ever saw that particular box.

Q. Did you see any one purchase that box with contents in New York or elsewhere?

A. I did not.

Q. All that you know, then, of your own knowledge of the box and contents is that this box arrived at the Wilson Packing Company's office by express?

A. That is all that I know in addition to what I have said previously.

Q. What else do you know about it in addition to the fact that it did come to the Wilson Packing Company by express, of your own knowledge?

A. I know that it was shipped from New York by our New York office, invoice of same coming by mail.

87 Q. Were you there when it was shipped, and did you see it shipped?

A. I was not there, and did not see it shipped.

Q. Why, then, do you say that it was shipped from the New York office?

A. Because we were notified of the shipment of same.

Q. Was there any description in that notification that showed you just what box it was that was shipped?

A. Yes, sir; there was.

Q. What was it, and where is that notification?

A. The notification was dated November 16th, 1877, and fully described the shipment.

Q. In what way did it describe it?

A. It said: "We have this day forwarded to you, packed in a 14-lb. case, two dozen of the 2-lb. St. Louis C. B."

Q. Is that all the description that was given in the notification?

A. Yes, sir.

Q. Is there any description in that special description any more than in the description of any case put up by any firm of any kind of goods?

A. Yes, sir.

Q. What is the description of that case different from any case of goods not including contents?

A. From the fact of its being shipped inside of a 14-lb. case; that is different from anything else. They don't usually ship goods in that way.

Q. Are there not several firms using 14-lb. cases for putting up meat?

A. Yes; but they always fill them with 14-lb. cans.

Q. Are you certain that they always fill them with 14-lb. cans?

A. I have never seen all that were filled, so I am not certain.

88 Q. Was there any description of this 14-lb. case excepting that it was a 14-lb. case in the notification to you; I mean in reference to the case but not to the contents?

A. No.

Redirect by Mr. MUNDAY:

Q. Can you produce the letter of notice inquired after in the cross-examination? If so, please produce it.

A. I can, and I have it here.

(The same is offered in evidence by counsel for complainants, and marked "Exhibit One, Billings.")

Q. What marks, if any, were on the box or 14-lb. case by which you could tell where the shipment came from?

A. It was a little paster of the express company marked New York, the same as you find on all packages which go by express.

Q. By what means do you connect this box with the letter of advice "Exhibit One, Billings?"

A. It was the only shipment on the road from our New York office at that time.

Q. Do you know, of your own knowledge, whether Mr. W. B. Clapp

was selling that kind of goods, such goods as are contained in this exhibit "One Dozen Cans?"

A. All I know is by seeing invoices.

Recross:

Q. Where did you ever see any invoices?

A. I don't remember exactly. I remember seeing one in our office.

Q. Is that the only one you ever saw?

A. I don't remember of others now.

89 Q. Then you never saw "invoices?" You have only seen one invoice.

A. I could not state positively.

Q. This invoice that you saw, did you see it at about the time the box arrived?

A. Yes, sir.

Q. It was the invoice of the contents of the box, was it?

A. It covered the contents of that box.

Q. Did you see the express paster, as you call it here, put on to the box?

A. I did not.

Q. Do you know, of your own knowledge, where it was put on to the box?

A. I do not.

HENRY F. BILLINGS.

"EXHIBIT ONE DOZEN CANNED MEAT."

Copy of matter upon the cans of this exhibit.

THE ST. LOUIS BEEF CANNING CO.

(Trade-mark.)

SOLID CORNED BEEF, COOKED READY FOR USE.

This can patented Jan. 30, 1877.

All ready for use—saves cooking. Cooked, select corned beef.

NOTICE.

In opening, be sure and follow directions on lower margin of the label. Before opening in warm weather, be sure and let the can lay in cold water or on ice till thoroughly cold, and the meat will then slice better.

Well known to be the best and choicest in the world.

Two-pound package. Solid, compressed, hermetically sealed. Will keep in any climate.

A delicacy. Economical. Choicest meats only used.

90 THE ST. LOUIS BEEF CANNING COMP.

Palatable, pure. Every package guaranteed. For family use, sea voyages, parties, excursions, etc.

COOKED CORNED BEEF.

Most economical for family use, being more than twice its weight of uncooked meat.

The company slaughtering their own cattle, using only the choicest, bought in the most advantageous market in the world, curing and can-

ning their beef with great care, do fully guarantee every package bearing their brand. The meat is thoroughly cooked, is compressed, and comes from the can in a solid form and is put up under a patented process which retains all the nutritive and delicious qualities of beef. Put up in two lb., four lb., six lb., and fourteen lb. cans.

To open this can: Commence at the star. Cut with can-opener around this dotted line, lift back the lid, and the meat will come out solid.

Copy of advertisements in this exhibit.

"The coming meat." New process. Solid and compressed, but moist. All juices and nutriment retained. The St. Louis solid corned beef. Ready for use. Cooked, select corned beef cooked ready for use.

THE ST. LOUIS BEEF CANNING CO.

Cooked corned beef. More than twice its weight of uncooked meat. Choicest canned meats in the market. Every package guaranteed.

THE ST. LOUIS BEEF CANNING CO.'S

canned corned beef, ham and tongue are the best in the world.

Cured and packed under a process entirely our own, leaving the meat solid in the can, so that it slices nicely; yet moist, and retaining all the juicy and nutritious qualities of the beef.

91 IT PAYS TO BUY IT.

It is cheaper than uncooked meat; all bone, gristle, etc., is removed; it is solid, compressed, and every pound is equal to more than two pounds of uncooked meat. It is cooked, ready for use on the table, or in any way cooked meat may be served.

It saves fuel, saves time, saves labor. It is unequalled for flavor and delicacy.

Put up in two, four, six, and fourteen lb. cans. Your grocer opens the can and sells it by the pound. Try it.

Take only our brand. For sale by all grocers.

TO GROCERS.—Be particular and have your customers follow directions printed on the bottom of the label in opening the can, and to have the can cooled by laying it on ice, in cold water, or in some cool place some minutes before opening. The meat comes from the can in a solid cake the shape of the can, and will slice nicely. It will benefit your trade to see that the can is cooled and opened according to directions. Please advise your clerks to so instruct purchasers.

P. S.—The cooked meats of the St. Louis Beef Canning Company are the choicest and best. Ask your jobber for them.

Exhibit One, Billings.

NEW YORK, *Nov.* 19, 1877.

WILSON PACKING CO.:

D'R SIRS: Your re'd despatches of Nov. 15, to the firm and the writer, rec'd and noted. We had to buy 3 doz. 2 lb. C. beef from the W. B. Clapp agency, through Bogle & Lyle, at 10 & 1½ % off list. We have also bought from F. H. Leggett & Co. 1 doz. 2 lb. C. beef at $4.50

less 10 & 1½ % off list; the invoices we enclose in this letter, and have this day forwarded to you, packed in a 14-lb. case, 2 doz. of the 2
92 lb. St. Louis C. beef. Mr. W. J. Wilson's desp'h of this afternoon rec'd, and acted on. No letter rec'd from you since Nov.
12. Enclosed please find S. 1 S.

Respectfully,

WILSON PACKING Co.
P.

Deposition of John A. Wilson.

JOHN A. WILSON, being duly sworn, testified as follows:

1. Q. What is your name, age, residence, occupation?

A. My name is John A. Wilson; age, 39 years; residence, Chicago; occupation, I am secretary and treasurer of the Wilson Packing Company.

(The complainant's counsel here offers in evidence reissue letters patent of the United States, No. 6451, granted to William C. Marshall, assignor to Arthur A. Libby, for an improvement in processess for preserving meat, dated May 25, 1875, and the same is marked Complainant's Exhibit, Marshall Patent; also, reissue letters patents of the United States, No. 6370, granted to Wm. J. Wilson, assignor by mesne assignments to the Wilson Packing Company for improvements in processess in packing and preserving cooked meats, dated April 6, 1875, and and the same is marked Complainants' Exhibit, W. J. Wilson Patent; also, reissue letters patent of the United States, No. 7923, granted to John A. Wilson for an improvement in sheet-metal cans, dated Oct. 23, 1877, and the same is marked Complainant's Exhibit J. A. Wilson Patent; also, an original assignment from W. J. Wilson, D. A. Loring, J. A. Wilson, and W. B. Clapp to the Wilson Packing Company of the original patent 149276, of which Exhibit W. J. Wilson Patent is
93 the reissue, and the same is marked Complainant's Exhibit W. J. Wilson Patent Deed; also, an original assignment from J. A. Wilson to the Wilson Packing Company of letters patent No. 161848, being the original patent of which Exhibit J. A. Wilson Patent is the reissue, and the same is marked Complainant's Exhibit J. A. Wilson Deed; also, the original agreement between the Wilson Packing Company of the one part, and Arthur A. Libby, Archibald McNeill and Charles P. Libby of the other part, and the same is marked "Complainant's Exhibit Wilson Packing Company and Libby Agreement."

2. Q. Do you know the defendant, Wm. B. Clapp?

A. Yes, sir.

3. Q. How long have you known him?

A. I have known Mr. Clapp about 9 years.

4. Q. What business relation, if any, did Mr. Clapp sustain to your company?

A. He was president and a stockholder.

5. Q. During what years?

A. 1874, 1875, and 1876.

6. Q. Was he familiar with the business of the Wilson Packing Company during those years?

A. To a large extent.

7. Q. Was he familiar also with the processes and methods employed by the said company in putting up canned meat?

A. He was.

8. Q. Was he also familiar with the trade and the customers of the said complainant company?

A. He knew the parties who bought the goods.

9. Q. When did he leave the said company, and under what circumstances?

A. He sold out his stock in the company in the month of April, 1877. He parted with his stock for a very large sum of money, amounting
94 for the stock which he held himself and controlled for others to the sum of $162,500, all cash. He drew the balance of the salary due him as president of the company, amounting to $500 or $600.

10. Q. What business did Mr. Clapp engage in after leaving your company?

A. He engaged in the business of disposing of the goods manufactured and packed in St. Louis, Missouri, by the St. Louis Beef Canning Company. He also was a stockholder in the same company—the St. Louis Beef Canning Co.

11. Q. Where did he engage in this business; where was his store, if you know?

A. On Chambers street, in the city of New York.

12. Q. Were you ever there?

A. I was.

13. Q. What kind of goods did he sell?

A. The canned goods of the St. Louis Beef Canning Co.

14. Q. Please look at the canned meats in the exhibit "One Dozen Cans," and state whether that is the kind of goods he was selling or dealing in at that place—Chambers street, New York.

A. From appearance I should say they were.

15. Q. Will you open a can of the meat of that Exhibit One Dozen, or examine one just opened, and state what you find therein?

A. I find a can full of compressed cooked meat of good quality, resembling in all respects the article of cooked compressed beef put up by the complainants, except the shape of the can and contents.

16. Q. Are you familiar with the art of packing and preserving meat? If so, state what your experience has been.

A. Somewhat familiar with it. I have been engaged in the business of preserving meat since I was a boy, and have been engaged in the canning business for over four years last past.

95 17. Q. Are you familiar with the patent exhibit W. J. Wilson Patent?

A. Yes, sir.

18. Q. Please compare the opened can of meat in Exhibit One Dozen with the second claim of said patent, and state whether or not the said meat is described in said claim substantially.

A. I should say it was; yes, insofar as it resembles the article put up by the complainants, that being described as a new article of merchandise or manufacture, cooked meat put up in a solid, compressed form in hermetically-sealed packages.

19. Q. Is it substantially the article described and claimed in the patent?

A. I should say it was.

20. Q. From your knowledge of the art, are you able to state approximately what process was used in putting up this article in the sample can of Exhibit One Dozen?

A. I should say the meat was first cooked, bone and gristle removed, and then compressed solidly into the can till the can was packed full of compressed meat. The air extracted or expelled, the can closed

hermetically, the process named and described in the patent exhibit Wm. J. Wilson.

21. Q. Would you say that the canned meat contained in the Exhibit One Dozen is substantially the same or substantially different from the article of manufacture described in the Exhibit J. A. Wilson Patent, and claimed in the third claim thereof?

A. I should say it was substantially the same. The meat is compressed solidly into a pyramidal can so that the can forms a mold for the meat compressed therein and permits its discharge as a solid cake upon the removal of the larger end of the pyramidal can.

22. Q. Are you the John A. Wilson named in that patent? If so, will you give a brief history of your invention of that article and its connection with your brother, W. J. Wilson's invention of the solid canned meat set forth in Exhibit W. J. Wilson Patent?

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A. I am the John A. Wilson mentioned in that patent. My brother, W. J. Wilson, had conceived the idea of packing compressed meat in hermetically-sealed packages, and had experimented for a long time, finding it difficult to remove in one solid cake or block the compressed meat from the cylindrical or ordinary-shaped packages or cans. I thought of making a can of a pyramidal or conical shape to obviate the difficulties which he labored under. We had not placed any upon the market in hermetically-sealed packages prior to my invention as described in reissue letters patent Exhibit W. J. Wilson Patent.

23. Q. To what extent has your said improvement gone into use or been copied by others?

A. It has been adopted by those who have imitated the article described in the two patents.

24. Q. To what extent?

A. Largely.

25. Q. What advantages are there, if any, in the can invented by you, and described in your letters patent?

A. The advantages are so apparent that it has become the only style of package of canned preserved meat that is now marketable to any great extent. The great advantage is the ease with which the meat can be taken from the can in one solid piece or block. Another advantage, the large flat surface proportionate to the size of the can, so that upon the extraction or expulsion of the air from the package a partial vacuum is created, and the atmospheric pressure directed upon the outer flat side of the can forces and retains the sides in upon the meat, retaining the meat in its firm, solid condition. Another advantage in regard to this peculiar shape is that upon the opening the can the access of the air or the release of the pressure from the outside by the ingress of the air causes the sides of the can to immediately expand to its original shape, thus greatly facilitating the discharge of the meat from the can—separating the contents from the metal.

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26. Q. To what extent, if any, have these features contributed to the success of the article?

A. These advantages have undoubtedly caused the article to meet with a sale unprecedented in the history of preserved meat. These advantages with the other advantages.

(Complainant's counsel here offers in evidence a case containing one dozen 2 lb. cans of the Wilson Packing Company's brand of canned meat, and one of the same dozen of the brand of Libby, McNeill & Libby, and the same is marked "Exhibit Two Dozen Complainant's Meat.")

27. Q. Please look at one of the cans of the Wilson Packing Company brand out of Exhibit Two Dozen, and state whether said cans in that exhibit are constructed in accordance with the John A. Wilson patent referred to.

A. They certainly are. That includes Mr. Libby's cans also.

28. Q. Does said Exhibit Two Dozen contain the article put up by the complainants in this cause under the patent sued on?

A. They do.

29. Q. What sizes, cans, as to weight, are employed by the complainants?

A. Four sizes, two pound, four pound, six pound, and fourteen pounds.

30. Q. Were those sizes known to the trade previous to their employment by the complainants?

A. The two-pound size was; the four, six, and fourteen pound were not.

31. Q. Please compare the two styles of can, complainant's and defendants', now before you in the several exhibits, and state whether they are substantially the same.

98 A. They are substantially the same, one having the same qualifications as the other.

32. Q. Do you know what process was used by the St. Louis Beef Canning Company in the preparation of this article, Defendants Canned Meat?

A. The result or product being identical, from my knowledge and experience in the business. I should judge the process to be the same as that used by the complainants in conformity with the patent sued on.

33. Q. Do you know whether the defendant, or the St. Louis Beef Canning Co., had any opportunity for learning the processes and methods employed by the complainants or either of them in the manufacture of this article; if so, state what said opportunities were fully.

A. The defendant had ample opportu'ity in the course of his three years' connection with one of the complainants, having free access to all the different departments of said complainant's packing-houses; and the St. Louis Beef Canning Company employed numbers of the expert employees of both complainants.

34. Q. How does the St. Louis Beef Canning Company's goods compare with the goods of other infringers or imitators of these patents?

A. Favorably; it is superior to this extent, that has met with a larger sale than any other imitation brand.

35. Q. Did you commence experimenting with your brother, in the original production of this meat?

A. I did.

36. Q. What was the prior state of the art at that time in reference to this class of goods?

A. There was, prior to the invention of W. J. Wilson, canned preserved meat put up in cylindrical cans packed loosely in the cans with added gravies, liquids, or a soft gelatinous fluid, and they were known as the Australian or Appert process goods.

99 37. Q. Was there any article of cooked meat of a solid or compressed character known prior to your brother's invention?

A. None within my knowledge, or any information I could get.

38. Q. What advantages, if any, exist in the article invented by your brother, namely, the cooked meat put up in a solid form, as compared with the kind previously known?

A. The meat is in a better condition to put upon the table, being fit

to slice; more sightly in appearance, more palatable, more nutritious, because it contains all the juices of the meat within itself; more wholesome, because more easily digested, and more economical because there is more meat in the same space, and free from sogginess, because it was not saturated with greasy water; and further, because the nutritious juices of the meat are not extracted and thrown away or wasted in the superfluous liquid surrounding the canned preserved meats in the old methods.

39. Q. Did your brother experience any difficulties in adapting and perfecting this article; if so, please state what they were and how long you and he continued to labor in its production before success was established?

A. We experienced a great many difficulties; I could not name them all now; nearly, if not quite, a whole year we experienced difficulties in getting the meat into the can; we experienced difficulties in preserving the meat; we experienced difficulties in getting it out after getting it in and we spent a great deal of money in the various experiments that we made in trying to overcome the difficulties, and we were told, more especically my brother was told, in my hearing, that he was doing or attempting to do what never had been done and what could not be done. The difficulties were surmounted when the pyramidal or conical shaped can was adopted.

40. Q. Were these experiments attended with expense; and, if so, about how much did they cost?

100 A. Several thousand dollars; we used up all the money we could get.

41. Q. What success has the article met with subsequently, as indicated by its sales?

A. It has met with great success both in this country and in Europe. The sale of it has amounted to several million dollars' worth by the Wilson Packing Company alone; upon information and belief, I think it is several millions more by the other complainant, and hundreds of thousands of dollars' worth by the defendant.

42. Q. Please state the extent of the canning business of the Wilson Packing Company for last year.

A. As an idea of the extent of the business, I would say that our purchases of the materials entering into the construction of the cans amounted in the aggregate to 3,000 tons of tin-plate, 260 tons of pig-tin, 300 tons of lead, and that during the season of packing we employed over 1,600 people daily. The total average employed by us during the entire year was 917 persons. The product in canned meats put up under these patents in that year amounted to over seven and one-half millions of cans of various size.

Adjourned to Thursday, August 22, 1878, at 2 o'clock p. m., by agreement, for cross-examination.

THURSDAY, *Aug.* 22, 1878.

Cross-examination by F. W. TOURTELLOTTE:

1. X Q. When did you first have any experience in the packing business?

A. I should say it was 25 or 26 years ago.

2. X Q. Where were you first engaged in the packing business?

A. In the city of Buffalo, State of New York.

101 3. X Q. In what capacity were you engaged at that time?

A. As a boy of general utility around the packing-house of my father.

4. X Q. What do you mean by "a boy of general utility?"

A. A boy capable of skinning out tails, cleaning the blood gutters, etc.; in fact doing everything connected with the business that a boy was competent to do.

5. X Q. How long were you engaged at Buffalo in this employment?

A. Between three and four years.

6. X Q. Where were you next employed after being employed at Buffalo, and for whom?

A. In the city of Chicago; for my father.

7. X Q. In what capacity were you employed by your father?

A. No definite capacity—general use.

8. X Q. In what kind of business?

A. In the packing business.

9. X Q. In what was he engaged in packing?

A. Beef and pork.

10. X Q. How long did you work for your father, and up to about what year?

A. For a number of years; up to 1857–'8, or '9; 1858 I guess.

11. X Q. Into whose employ did you go after having left your father?

A. Into business for myself with my brother.

12. X Q. Where did you go into business, and what was that business?

A. In Chicago; the business was slaughtering.

13. X Q. How long did you continue in business with your brother?

A. Until the war broke out—in 1861.

14. X Q. In what business were you engaged from 1861 for several years thereafter?

102 A. Serving in the United States Army up to the fall of 1865.

15. X Q. In what business were you engaged after 1865?

A. I went into the employ of Cragin & Co., large beef and pork packers in the city of Chicago.

16. X Q. In what capacity did you go in their employ?

A. I purchased live stock and provisions for three seasons for them. I then superintended their packing-house at Chicago, and at Shreveport, Louisiana, until 1870, and from 1870 to 1872 I was engaged in buying and selling of cattle on my own account; I then began experimenting with my brother on various processes for preserving meat.

17. X Q. Was the process afterwards patented by W. J. Wilson one of those processes that you experimented on?

A. The process patented by W. J. Wilson was the result of the experiments made by W. J. Wilson, and he is entitled to the whole credit thereof.

18. X Q. How long were you engaged in those experiments?

A. For several months in each of those years, or up to the time the patent was issued.

19. X Q. When and in what year did you commence the business of putting up meat in tin cans?

A. We began putting up meat in tin cans in the winter of 1873 and spring of 1874.

20. X Q. When did you first become acquainted with the defendant, Wm. B. Clapp?

A. About nine years ago.

21. X Q. In what year did you and your brother first have any business relations with Wm. B. Clapp?

A. My brother had business relations with Wm. B. Clapp in 1869; we jointly had business relations with him in 1873.

22. X Q. What was the nature of the business you and your brother had with him in 1873?

103 A. We engaged in a partnership in the preserving meat business.

23. X Q. At what time was the corporation known as the Wilson Packing Co. formed?

A. In the spring of 1874 the license was granted to form a corporation.

24. X Q. In what were you engaged in connection with your brother and defendant up to that time?

A. In the meat-preserving business and experimenting in the preserving business.

25. X Q. Do you mean experimenting in reference to one of the patents which was afterwards issued to Wm. J. Wilson, mentioned in this suit?

A. Not particularly with reference to that, but the experiment brought about the patent mentioned in this suit; to be more technical, I should say the experiments that were made at different times proved failures, until Wm. J. Wilson conceived the idea of solidly compressing the tin can full of meat so that it would come out in one solid cake.

26. X Q. How long after the formation of the corporation known as the Wilson Packing Co. was it before you commenced putting up meat in cans in the manner mentioned by you in your direct examination?

A. If you mean how long it was after the formation of the company that we commenced putting up goods in tin cans for sale upon the market, I should say it was several months.

27. X Q. Was the defendant actively engaged with you during all the time from the time he first commenced with you and your brother up to the time you commenced putting meat on the market in tin cans?

A. He was actively engaged from the time of the formation of the company.

28. X Q. During the years 1875, 1876 and 1877 at what place in the city of Chicago were you engaged in business?

104 A. At the offices and warehouses of the Wilson Packing Co., on Canal street, in the city of Chicago.

29. X Q. When did you first go into business at the offices on Canal street?

A. In the fall of 1874.

30. X Q. Do you know how many head of cattle were slaughtered and put up by you per day during the year 1875—I mean the Wilson Packing Co.?

A. The books of the company would show, but my recollection is that we packed from 100 to 300 head per day; some days more.

31. X Q. Do you know how many head of cattle per day were put up by the Wilson Packing Co. in the year 1876?

A. I do not exactly remember the number, but it was considerably larger than in 1875; I might average for the whole year 200 head per day.

32. X Q. How many head of cattle were put by the Wilson Packing Co. during the year 1877 per day?

A. I would only guess at it; not having the books of the company here, I would say that it was more than in 1876. Some days as high as 800. During the packing season 300 head would be about the average.

33. X Q. What months or what part of the year was considered the packing season?

A. From August—about the first of August to the first of April.

34. X Q. During the balance of the year was there much business done in your line of packing?

A. It was light.

35. X Q. In comparison to the packing season, what proportion during this time?

A. Less than a quarter.

36. X Q. Do you know what number of hands were employed by your company during the year 1875?

105 A. I don't recollect, now.

37. X Q. About how many?

A. Two or three hundred or more; could not tell any nearer than that.

38. X Q. How many hands were employed by your company, as near as you can recollect, in the year 1876?

A. More than in 1875; I could not tell how many without looking at the book.

39. X Q. Can you form any estimate of about how many more than in 1875?

A. It might have been 500; it might have been more or it might have been less; I cannot tell any nearer.

40. X Q. How many did your company employ in the year 1877?

A. As high as 1,600 in number, with an average of about 900 per day.

41. X Q. Do you mean during the whole year or during the packing season, from August to April?

A. During the whole year.

42. X Q. Do your books show the account?

A. They do.

43. X Q. Will you produce before the examiner or commissioner a statement from your books of the whole number of men employed by the Wilson Packing Company during the year 1877.

A. I can produce such a statement should the court demand it.

44. X Q. Will you produce such a statement and annex the same to this, your deposition?

A. If my testimony on that point is to be impeached, I will produce such a statement.

45. X Q. When did the defendant sever his connection with the Wilson Packing Company?

A. In the spring of 1877.

106 46. X Q. Do the books of the Wilson Packing Company show the number of cattle packed by you during the years 1875, 1876 and 1877?

A. I think they do.

47. X Q. Will you produce a correct statement from your books, showing the number of cattle packed by you during the years 1875, 1876 and 1877, and attach the same to this, your deposition?

A. I shall not volunta'ily do anything of the kind.

48. X Q. Will you attach such a statement to this deposition at the request of the defendant's attorney in this suit on this examination?

A. I will consider the matter.

49. X Q. Will you or will you not produce such a statement?

A. I have said I will take the matter into consideration before deciding.

50. X Q. Is this the only answer you will give to the question?

A. That is only the answer I will give now.

51. X Q. Were you ever engaged in the business of buying or selling canned meats, excepting so far as you have sold the meats of the Wilson Packing Company, in your life?

A. No, sir.

52. X Q. Have you any actual or personal knowledge of the business connected with selling or buying canned meats, except as connected with the Wilson Packing Company?

A. I have thoroughly investigated the business of buying and selling canned meats since my connection with the Wilson Packing Company, as it was practiced before and since the W. J. Wilson article was put upon the market for sale.

53. X Q. In what way have you investigated it?

A. By reading various publications on the subject, and making inquiries among dealers therein.

107 54. X Q. What dealers have you inquired of?

A. The leading wholesale and retail grocers.

55. X Q. Where?

A. In the United States.

56. X Q. Give the name of one you inquired of?

A. I could give the names of quite a number, but as you ask for only one I will mention E. C. Hazard, of the city of New York.

57. X Q. Who else?

A. H. K. Thurber, of the city of New York, who, it is supposed, is the largest wholesale grocer in the United States.

58. X Q. What inquiry did you make of Mr. Hazard?

A. I exhibited to Mr. Hazard a can of meat preserved according to the patent of Wm. J. Wilson and contained in a can patented by myself in the summer of 1874. He pronounced the same a great improvement upon anything in the way of preserved meat that he had ever seen in the course of a long and quite large business of handling canned meats, and that it would meet with a large sale. I asked Mr. Hazard what he thought of it and the foregoing was the answer in substance to the question.

J. A. WILSON.

The further taking of testimony adjourned by consent to August 31, 1878, at 2 p. m.

Exhibit Two Dozen Complainant's Meat.

(Copy of label on cans in this exhibit.)

WILSON PACKING COMPANY.

Celebrated compressed corned beef.
Cooked ready for table use.

CHICAGO.

108 NOTICE.—Thoroughly cool the can before opening, either by ice or cold water; by so doing, the meat will slice much nicer.

Be sure to use a sharp knife in slicing. We are fully protected by United States patent laws. Any infringement will be prosecuted promptly and to the extent of the law.

WILSON PACKING COMPANY, CHICAGO.

Patented Mar. 31, 1874. Reiss'ed April 6, 1875,
In the U. S. & Canada.

Wilson Packing Company's celebrated compressed corned beef; cooked ready for table use; hermetically sealed; sure to keep in all climates; in 2 lb., 4 lb., 6 lb. and 14 lb. packages, Chicago.

NOTICE.

COOKED CORNED BEEF.—This delicious article of food is thoroughly cooked from the choicest of meats, retaining all the nutritious qualities of the same, and pressed solid into this case. Can be cut into thin slices; will keep perfectly, and is a luxury within the reach of the most economical, as it contains more than double the quantity of uncooked meat.

For parties, excursions and sea voyages it is unequaled, and is highly prized by housekeepers who desire to avoid much cooking. As the company cure all their own meats, they can and do guarantee their excellent quality.

Patented Mar. 31, 1874. Reissued April 6, 1875,
In the U. S. & Canada.

Commence cutting here ———>. To open the can, cut on the line all around the can; turn the can up and the meat will slide out.

109 *Deposition of Arthur A. Libby.*

ARTHUR A. LIBBY, being duly sworn, testified as follows:

1. Q. What is your name, age, residence, and occupation?

A. My name is Arthur A. Libby; age, 46 years; residence, Chicago; occupation, packer of provisions and canned meats; am one of the firm of Libby, McNeill & Libby of the complainants in this cause.

2. Q. Are you familiar with the several patents sued on in this cause, to wit, the Complainants' Exhibits, Marshall, and the W. J. Wilson, and J. A. Wilson Patents?

A. I am.

3. Q. What experience have you had in the art of packing and preserving meats?

A. I have had about three years' experience in packing canned meats; about twenty-five years' experience in packing and handling beef.

4. Q. Were you familiar with various kinds of canned beef upon the market prior to 1874?

A. I was, with many kinds.

5. Q. In what respect did such prior articles differ, if in any, from the article of cooked compressed beef now put up by your firm under the patents sued on?

A. The meat put up by our firm is in a compressed form, the can entirely filled with solid compressed meat, and when opened comes out in one solid piece, pleasing to the sight, and can be nicely sliced ready for

the table. In the prior articles, the meat was merely filled in the cans and not compressed; when the can was opened it was only partially filled with meat, the balance of space of the can was filled with water, gravy, and greases, and the meat instead of being in a solid form would fall in pieces, each piece being surrounded with liquids heretofore named.

6. Q. Do you consider these material and substantial differences?

110 A. I do decidedly so.

7. Q. Please look at the opened sample can of Exhibit One Dozen and state whether or not in your opinion such sample can, put up by the St. Louis Beef Canning Co., and sold by W. B. Clapp, the defendant, is the same or a different article from that put up by your firm, and the Wilson Packing Co., under the patents sued on in this cause?

A. I believe it to be the same article and put up precisely in the same manner and by the same process, only excepting the shape of the can.

8. Q. Does the can differ in any essential respect from the can employed by the complainants, or does the difference in shape mentioned by you in your last answer make a substantially different can?

A. The can is substantially the same as the one used by the complainants, notwithstanding the difference in shape.

9. Q. State, if you know, the general opinion of the trade as to the article of solid compressed cooked meat put up under the patent sued on in this cause, as compared with the kinds of canned meats previously on the market?

A. I know it is considered an entirely new thing by the trade in this country as well as in Europe, and entirely different from other canned meats put up prior to this article. It is also considered by the trade as a great improvement over all other articles of canned meats, the demand having been so large that the old kind of canned meats is almost unsaleable.

10. Q. You state that you were engaged in the packing business for twenty-five years and in the canning business for three years; what reason had you, if any, for embarking in the canning business, and did you make any investigation of this article of compressed cooked beef and of the art generally, before embarking in the canning business. In your answer, state fully all you did, and what you ascertained in reference to the older art, and to the patented improvements.

111 A. Previous to embarking in the canning business, our method of putting up beef was by salting it in barrels or tierces, and filling the cask with brine. This method continually grew into disfavor, for the reason that the salt extracted all the juices of the meat, leaving it hard, indigestible and unfit for food. It became evident to me that some other method must be adopted for preserving meat. The demand also for such salted meats having so largely fallen off, we investigated the matter as to the best manner of meeting the wants of the public, examining thoroughly all the old methods of putting up canned meats, and unhesitatingly decided that the process now used of putting up compressed meat in cans, as now used by complainants, was by far superior to anything previously discovered; accordingly we made arrangements with the Wilson Packing Co., and started in the business about three years ago, and up to the present time we have invested a large capital in the business.

11. Q. To what extent has your business of putting up canned meats grown?

A. Well, we commenced by putting up from 50 to 75 cattle per day,

and the trade has increased gradually since the beginning, and for the past few months we have put up from 500 to 700 cattle daily, employing now about 1,000 to 1,200 hands.

12. Q. To what quarters and parts has your trade in this article extended?

A. Probably to all quarters of the globe. We have sold quite a large quantity to the British Government—as much as 25 car-loads at a time. We have also made sales to a few other European governments, but not very much. I understand the Wilson Packing Company have sold the United States Government largely.

Adjourned to Thursday, August 22, 1878, at 2 o'clock, by agreement, for cross-examination.

AUGUST 22, 1878.

Cross-examination waived by Mr. Tourtellote, for defendant.

ARTHUR A. LIBBY.

112 *Deposition of John Winslow Jones.*

1. Q. What is your name, age, residence, and occupation?

A. John Winslow Jones; age, 49 years; residence, Deering, Maine; occupation, packer and dealer in hermetically-sealed goods.

2. Q. How long have you been in your present business?

A. About twenty-seven years.

3. Q. Where?

A. My headquarters has always been in the city of Portland. My business has been in various parts of the State and Provinces of Canada and Nova Scotia.

4. Q. Have you canned meats during any portion of that time; and, if yea, during what portion?

A. I have canned to some extent through nearly all of those years.

5. Q. Did you put up meats during the war of the rebellion?

A. I did, largely.

6. Q. Did you put up any for the U. S. Government during that time?

A. I did, largely.

7. Q. You are familiar, are you not, with the processes most usually practiced in putting up canned meats during the time you have been in the business?

A. I am.

8. Q. You are also familiar, are you not, with the various kinds of canned meat which have been in the market during the same time?

A. I am, except within a few years there are some brands of meat which have come into the market which I have not examined particularly.

9. Q. I produce a can of the complainants' meat, unopened, which is marked "Complainants' Exhibit Complainants' Meat, William K.
113 Neal, notary public." I also produce another can of the same, opened, and ask you to examine the same, and to state whether you have before seen other cans of the same kind?

A. I have examined them, and have before seen cans of same kind, and have examined the contents.

10. Q. Are you able to distinguish the complainants' article from all other articles on the market which were within your knowledge prior to 31st day of March, 1874?

A. It may have been possible that there were brands of beef something similar to the beef packed by Wilson and Libbys of Chicago,

after 1874, but not to my knowledge; but I am quite sure there was not prior to two years before that time. I can distinguish the article packed by Wilson and Libbys from any beef packed before the time above mentioned.

11. Q. Did you ever see the article prior to the time the Wilson meat was first brought to your notice, or any similar article?

A. I never did.

12. Q. How did the Wilson article strike the trade when it was first introduced, as regards its novelty?

A. It was considered an entirely new article of trade, entirely different from meat packed by the old methods.

13. Q. State, whether during the war, or at any other time prior to 1874, you put up any cans of meat wherein the cooked meats were so compressed and the cans was so filled that the contents was solid and filled the can, constituting a can full of solid compressed cooked meat in its natural state, not disintegrated or desiccated, like the complainants' exhibit.

A. I never did put up any that compared, and I never saw any packed by any other parties that did.

14. Q. Please state what you know of the demand for the complainants' article, and how, if at all, it has affected the demand for the meats put up in the ways practiced prior to the introduction of the Wilson article. If you know anything about the European markets, please state it.

114 A. I am familiar with the markets in this country and in Europe, and am personally acquainted with many of the largest dealers in this article in this country and Europe. My business brings me in direct contact with them, and I know that this meat has almost entirely driven meat of other ways of packing out of the market, and many parties within the past few years have tried to imitate this beef in various ways, as it is almost impossible to sell beef packed in any way except solid in the can, without water.

15. Q. What is your opinion of the complainants' article; Is it an improvement, or not, in the art?

(Defendant's counsel objects to form of question.)

A. I think it is a very great improvement in the art, and think the great demand for the article illustrates the fact.

16. Q. Do you consider the complainants' article as deserving the protection of the patent law, or not?

A. I have had considerable experience in procuring patents, and from the knowledge I have acquired in that way I should say that it is.

17. Q. These patents to which you refer were upon processes for preserving food?

A. A portion of them were; various other patents besides.

18. Q. In the processes of packing used by you did you employ pressure upon the meat for any purpose, and, if so, for what, previous to the time complainants' article was first introduced?

A. I never have for the purpose of forming pressed beef in cans, but sometimes in putting raw beef into cans I have used a slight pressure for convenience in putting in the covers.

19. Q. In those cans to which the pressure was applied did the meat, after the preserving process, fill the can solidly like the complainants' article?

A. It did not.

115 Cross-examination by F. W. TOURTELLOTTE:

1. X Q. During what portion of the time you have been engaged in packing have you been engaged in packing meat?

A. During the first part of the time I mentioned I did considerable nearly every winter and spring, as it was largely used at the time for California market; then, during the war, for the Army and Navy supplies; late years, since the introduction of the Wilson beef, I have done but very little at it except a few small contracts for the Navy.

2. X Q. Was your manner and process of putting up meats similar to that used by complainants in putting up their meats?

A. I never was in the establishment of Wilson or Libbys', and never saw their process of packing, but the articles when packed were quite different.

3. X Q. In what way different?

A. The beef packed the way I packed it contained more or less water, according to the quality of the beef, so that each piece of beef in the can, when opened, would be separate and surrounded by water, and could not be cut in slices nor emptied out in one piece from the can like the Wilson and Libbys beef.

4. X Q. Have you been acquainted with the firms and persons engaged in packing meats in sealed cans throughout the Eastern States during the last eight or ten years?

A. I think I know them all in the New England States, and some parties in New York.

5. X Q. Are you acquainted with the various processes used by these firms in putting up meats in cans?

A. I am.

6. X Q. State, if you know, if any of them used any process the result of which was similar to that produced by the complainants.

A. They did not prior to 1874.

116 7. X Q. In what condition were the meats canned by these various firms prior to 1874, when canned?

A. They contained more or less water, according to the quality of the meat, and were not as solid in the can. They could not be cut with a knife, as this is cut. I have seen beef packed in a can, large, heavy ox beef, and packed in one piece, that could be cut with a sharp knife when the can was opened, but ordinary packing I should say contained nearly 10 to 20 per cent. of water free in the can. This is merely an estimate. I am not speaking from actual weight.

8. X Q. You have procured several patents, have you not, for packing various articles in cans?

A. I have.

9. X Q. How long have you known of the beef put up by the complainants?

A. I cannot state positively; I should say four years.

10. X Q. Have you seen or known of any meats packed within six years the result of which was the same as that of complainants?

A. I have not seen any packed since 1874. I have within a year past, or a little more, packed a kind of pressed beef, fresh beef, in a different way from that, and have procured a patent on it, with a knowledge at the Patent Office of the patents of Wilson and Libbys. This beef can be cut in slices. Do not consider it an infringement on complainants.

(Signed) J. WINSLOW JONES.

Deposition of Charles S. Morrill.

1. Q. What is your name, age, residence, and occupation?

A. My name is Charles S. Morrill; age, 42 years; residence, Portland, Maine, and my occupation is that of a packer of canned goods.

117 2. Q. How long have you been in the packing business, and where?

A. I have been engaged in the packing business since 1851, in Portland.

3. Q. With what firm are you now connected, and with what firms have you been connected in said business?

A. Am now connected with firm of Burnham & Morrill, formerly with Rumery & Burnham.

4. Q. Are you familiar with the various kinds of canned meats which have been put up in Portland during the time you have been in business?

A. I am.

5. Q. The firm of Rumery & Burnham were packers of canned meat, and the firm of Burnham & Morrill also, are they not?

A. The firm of Rumery & Burnham were and the firm of Burnham & Morrell are packers of canned meats.

6. Q. You are familiar with the processes practiced by said firms in putting up their meats, are you not?

A. I am.

7. Q. Are you familiar with the article of canned meats put up by complainants in this cause?

A. I am not.

8. Q. I will produce a can, unopened, and request the notary to mark the same "Complainants' Exhibit Complainants' Meat." I also produce an opened can of the same, and request you to examine the said can. (After examination by witness.) Please state whether you have before seen the article, or cans of same kind.

A. I have.

9. Q. Please state from your examination of this meat, and from cans of the same which you have previously seen, whether the firm of Rumery & Burnham or firm of Burnham & Morrell ever put up any cans of meat wherein the can, after it has been put through the preserving process, is full of solid compressed cooked meat, in its natural state, like the article now shown you.

118 A. It never did.

10. Q. Did you ever see any such article prior to the time the complainants' meat was first brought to your notice?

A. I never did.

11. Q. From your experience in the packing business, do you or not regard the complainants' article as an improvement in the art of preserving meat?

(Form of question objected to by defendant's counsel.)

A. In answer to that question will say that if the complainants' fresh beef is similar to this it is a great improvement. This is the only article of the complainants which I have seen.

12. Q. Do I understand you to say that you have never seen any fresh beef put up by complainants?

A. I never have.

13. Q. Your estimate, therefore, is made wholly from your inspection of the complainants' corned beef?

A. It is.

14. Q. In the processes practiced by your firms did you ever compress meat into the cans with a view to the production of an article of compressed meat like the complainants?

A. I never did.

15. Q. Did you use pressure at any time in the processes, and, if so, for what purposes?

A. We did at times use a small lever to press the meat in when it was stiff and cold, after the meat had been frozen.

19. Q. The article produced by the use of this pressure, was it or not after it had passed through the preserving process, like the compressed meat of the complainants?

A. It was not.

Cross-examination by F. W. TOURTELLOTTE:

1. X Q. Where were you engaged in packing in 1851?

A. In Portland.

119 2. X Q. In what capacity were you engaged at that time, in that business?

A. Merely as a boy around the shop, filling cans and the like.

3. X Q. Did you have anything do with the practical part of putting up meats at that time?

A. I did.

4. X Q. How large an establishment was that at which you worked at that time? How many hands were employed in that business at that time?

A. It was a small establishment; perhaps fifteen or twenty men were employed.

5. X Q. What kind of meat did the firm put up?

A. Beef, mutton, and veal chiefly.

6. X Q. Have you had any knowledge of the various firms putting up meats in the Eastern States during the last eight or ten years?

A. I have.

7. X Q. Have you a knowledge of various kinds of meat put up by them and the modes of putting it in the cans?

A. I have.

8. X Q. Do you not know that some or all of the firms with which you have been acquainted, and whose process you are acquainted with, put up meat similar to that shown in the exhibit?

A. I do not.

9. X Q. Are you well enough acquainted with the various processes of putting up meat by these several firms to state positively that none of them put up meat similar to that in the exhibit?

A. I am.

10. X Q. How long was Samuel Rumery in the packing business prior to his decease?

120 A. I cannot tell. I think he engaged in business in 1844—1845, and died in 1873 or 1874. He was in this business all that time.

Redirect examination by E. S. EVARTS:

17. Q. You have stated that at the time you commenced work for Rumery & Burnham they employed fifteen or twenty hands. Did their business afterwards increase, and, if so, to what extent?

A. In the meat department of their business it did increase in 1861–'62–'63; they employed 150 hands or more.

18. Q. Are you the Morrill of firm of Burnham & Morrill, and, if so,

please state how the business done by your firm compares in amount with the business done by other firms in same line of business in the New England States, or Eastern States?

A. I am the Morrill of firm of Burnham & Morrill. We do about as much business as any of them. It is one of the largest firms in the Eastern States.

(Signed) CHARLES S. MORRILL.

Deposition of William G. Davis.

1. Q. What is you' name, age, residence, and occupation?

A. William G. Davis; age, 53 years; residence, Portland, Maine; by occupation packer of hermetically-sealed goods.

2. Q. What is the style of the firm to which you belong?

A. The Portland Packing Company, or Davis, Baxter & Company.

3. Q. How long have you been in the present business and where?

A. Eighteen years in Portland.

121 4. Q. Have you during that time packed meats in cans; if so, where, and during what portion of that time?

A. We have packed meats fifteen years out of that time, usually commencing in November or December, and packed from one to three months, in each of those years.

5. Q. How many hands do you employ in your business?

A. At different seasons of the year it varies from two hundred to two thousand hands.

6. Q. Have you seen the article of compressed cooked canned meat put up by the complainants, and, if so, where did you first see it?

A. I have seen it; I cannot fix the exact time.

7. Q. Did your firm ever produce, or put up, prior to the introduction of the complainants' article, any can full of solid compressed cooked meat in its natural condition, like the complainants' article?

A. We never did.

8. Q. Did you ever, prior to that time, see any such article?

A. I think Wilson's was the first beef of that kind I ever saw put up.

Cross-examination by F. W. TOURTELLOTTE:

1. X Q. Where have you done your business within the time spoken of?

A. In Portland.

2. X Q. Have you been acquainted with the packers who have done business in the New England States in the last ten years?

A. I have.

3. X Q. Have you known the kind of meat they put up?

A. I have.

122 4. X Q. Have you known the appearances of the product after having been canned, from actual inspection?

A. I have.

5. X Q. Do you know what kind of canned meats have been sold in the markets during the last 8 or 10 years; all of the various kinds?

A. I think I know all the principal canners' meat.

6. X Q. In what way do the different kinds of meat differ from the complainants' article, after having been put up?

A. They differ by being more liquid in the can; they are not solid and compressed; they are put up fresh.

7. X Q. Was that the general way of packing all these meats prior

to the packing of these complainants' meats, so far as your knowledge went?

A. It was.

(Signed) WILLIAM G. DAVIS.

Deposition of William McHowell.

1. Q. What is your name, age, residence, and occupation?

A. William McHowell; aged 40 years; residence, Bluehill, Hancock County, Maine; by occupation packer of hermetically-sealed goods.

2. Q. Have you ever been engaged in canning meats, and, if so, when, where, and for how long?

A. I have been so engaged with William Underwood & Co., of Boston; J. Winslow Jones, at Westbrook; and Gillan & Sons, of Leith, Scotland; was with Underwood from 1861 to 1866; with Jones from 1869 to the present date nearly all the time; was with Gillan & Sons in October, November, and December, in year 1868.

3. Q. Were you ever in the employ of W. K. Lewis & Co., of Portland, Maine, and Boston, Mass., and, if so, in what capacity and when?

123 A. Yes, sir; as a tinsmith—as nearly as I can remember in the year 1867.

4. Q. Did you, while in their employ, observe or become familiar with the process used by them in putting up meat in cans, and with the products of the process?

A. Yes, sir; I did.

5. Q. While you were in the employ of Wm. Underwood & Co., J. Winslow Jones, and Gillan & Sons did you become familiar with the processes practiced by them respecting the putting up meat in cans, and with the products of such processes?

A. I did.

6. Q. Have you seen the article of solid compressed cooked meat put up by the complainants, and, if so, when did you first see it?

A. I have, some three years ago.

7. Q. Did the firm of Wm. Underwood & Co. ever produce or put up, prior to the introduction of complainants' article, a can full of solid compressed cooked meat, in its natural condition?

A. Not to my knowledge.

8. Q. Did J. Winslow Jones ever produce or put up, prior to the introduction of complainants' article, a can full of solid compressed cooked meat, in its natural condition?

A. Not to my knowledge.

9. Q. Did Gillan & Sons ever produce or put up, prior to the introduction of complainants' article, a can full of solid compressed cooked meat, in *in* its natural condition?

A. Not to my knowledge.

10. Q. Prior to the time you first saw the complainants' article, had you ever seen a can full of solid compressed cooked meat, in its natural condition, like complainants' article?

A. I never had.

11. Q. While you were in Europe did you ever visit any markets or other places where hermetically-sealed canned meats were exposed for sale, and, if so, where?

124 A. I did, in Glasgow, Edinburgh, London, and Liverpool.

12. Q. Your answer to the tenth question, does it embrace what you saw in these European markets?

A. It does.

13. Q. What differences, if any, do you find between the complainants' article and the meats put up by the firms with which you have been engaged prior to the introduction of the complainant's article?

A. Complainants' article opens more solid, has not the appearance of being overcooked, and can be readily sliced without breaking up, while meats packed in the old style have a watery and stringy appearance, and fall in pieces when taken from the can.

14. Q. Do you find any difference, as regards the fullness of the can, between complainants' article and the old article?

A. I do; complainants' can is full; in the old style of packing there is quite a space.

15. Q. In the old style of packing did or did not the meat come from the can in a compressed condition like the complainants'?

A. It did not.

16. Q. What is your opinion of the complainants' article as compared with meats put up in the old way; has it any merits not possessed by the old?

(Defendant's counsel objects to form of question.)

A. The complainants' article is superior; it is superior in being more compressed in the can.

Cross-examination by F. W. Tourtelotte, of counsel for the respondents, waived.

(Signed) WILLIAM McHOWELL.

125 *Deposition of Winthrop S. Jordan.*

Q. 1. What is your name, age, residence, and occupation?

A. Winthrop S. Jordan; age, 57 years; residence, Portland, Maine; occupation, merchant, dealing in ship-stores, ship-chandlery, and groceries.

Q. 2. How long have you been in your present business, and where?

A. I have been in business in Portland since 1844.

Q. 3. Have you during that time dealt in canned meats?

A. I have.

Q. 4. During what portion of the time?

A. Perhaps twenty-five years.

Q. 5. What varieties of canned meats have you so dealt in?

A. All kinds that have been put up.

Q. 6. Have you seen the article of complainants' pressed cooked meat, put up by the complainants in this cause, and, if so, when did you first see it, as nearly as you can remember?

A. I have. I think it was about three years ago when I first saw Wilson's beef.

Q. 7. Have you sold it in your business?

A. I have.

Q. 8. How has it been received by the trade?

A. It has given very general satisfaction.

Q. 9. How was it regarded by the trade when it first came out, as regards its novelty?

A. It was considered a new thing; different from anything we had ever had. We had had fresh meats canned, but never had corned meats before.

Q. 10. Had you ever seen, previous to the introduction of the complainants' article, any meat which came from the can in a solid, compressed condition, like the complainants' meat?

A. I never did. All the meats I had ever seen before came out of the cans loose.

Cross-examination by F. W. Tourtellotte, esq., of counsel for respondent, waived.

(Signed) WINTHROP S. JORDAN.

126 *Deposition of George F. Lewis.*

GEORGE F. LEWIS, being first duly sworn according to law, deposes and testifies as follows in reply to questions propounded by Arthur A. Libby, one of the complainants in above-named cause:

Q. 1. What is your name, age, residence, and occupation?

A. George F. Lewis; age, 68 years; residence, Portland, Maine; and occupation, dealer in hermetically-sealed goods.

Q. 2. How long have you been engaged in the business of packing canned goods, and where?

A. I have been in this business for the past thirty-three years, in Portland.

Q. 3. With what firm are you now connected, and with what firm have you been connected in this business?

A. Always have been connected with the firm of W. K. Lewis & Bros., and am now connected with said firm as a partner in the business.

Q. 4. Was there ever such a firm as W. K. Lewis & Co. engaged in the canning business in the city of Portland, to your knowledge?

A. Not to my knowledge.

Q. 5. During what time was the firm of W. K. Lewis & Bros. engaged in canning meats in the city of Portland?

A. We commenced in 1845, and packed until about three years ago, when we removed our works up to Boston.

Q. 6. Are you familiar with the processes practiced by said firm with which you have been connected in canning meats?

A. I am.

Q. 7. Are you familiar with the various kinds of canned meats which have been put up in Portland during the time you have been in the business?

A. I am.

Q. 8. Are you familiar with the article of compressed cooked meat, in solid form, in its natural state, put up by the complainants in this case?

127 A. I think I am.

Q. 9. Did you ever see any such article prior to the time the complainants' meat was first brought to your notice?

A. Never.

Q. 10. How did the complainants' article strike the trade when it was first introduced, as regards its novelty?

A. Favorably, I should say. It was considered an entirely new thing.

Q. 11. In the processes practiced by your firm did you ever compress meat into the cans with a view to the production of an article of compressed meat like the complainants'?

A. We never did.

Q. 12. Please state the extent of the business of your firm as compared with other firms engaged in canning meats in the New England States.

A. We did a larger business than any other firm that I know of up

to the year 1862. Since that date, I think, some other firms have done more than we have.

Q. 13. Are you or is your firm in any way interested in the result of the suit in which your deposition is given?

A. Not to my knowledge.

Q. 14. Is your firm still engaged in packing meats in Boston?

A. It is.

GEORGE F. LEWIS.

Deposition of Francis G. Davis.

Int. 1. What is your name, age, residence, and occupation?

A. Francis G. Davis; 40 years old; reside at Newton, Mass.; am agent for the Lawrence Duck Mill, Plymouth Woolen and Cotton Factory, and am an importer of tea.

Int. 2. What business were you engaged in previous to your present business, during what period, and where?

128 A. In ship stores and chandlery, from about 1856 to 1872 or 1873. I was in business in Boston. I was a member of the firm of H. C. Brooks & Co. Think we dissolved about 8 years ago.

Int. 3. While in said business did you deal in canned meats?

A. I did. We dealt very largely in them; I think more so than any firm in Boston. We ran a line of packets at that time to Australia. We carried large quantities of canned meats for our passengers, and our shipper sent large quantities of said meats to Australia.

Int. 4. Have you seen the article of solid compressed cooked meat put up by the complainants in this cause?

A. I have.

Int. 5. How did said article strike you when you first saw it, as regards novelty?

A. It struck me as an improvement on the other. By the other I mean the meat we had been in the habit of shipping and buying.

Int. 6. Had you ever previously seen any article of solid compressed cooked meat similar to complainants'?

A. I never had.

Int. 7. The meat that you were familiar with before complainants' article came out, what appearance did the meat have when it came out of the can?

A. It had the appearance of meat cut off and put into the can in the natural state, without compression, and containing more or less liquid.

(Signed) FRANCIS G. DAVIS.

No cross-interrogation.

Deposition of Henry R. Tucker.

Int. 1. What is your name, age, residence, and occupation?

A. Henry R. Tucker; am 37 years old; live in Boston; am a dealer in canned goods.

129 Int. 2. How long have you been in the canned-goods business, either for yourself or others?

A. For myself six years. I sold goods as traveling salesman previously for ten or eleven years, and handled all kinds of canned goods.

Int. 3. Have you seen or handled the article of canned meats put up by any of the complainants herein; and, if so, when did you first become acquainted with said article?

A. I have handled the goods put up by both companies. I first became acquainted with said article between four or five years ago.

Int. 4. Previous to your knowledge of complainants' article, had you ever seen any similar article of solid compressed cooked meats in cans?

A. No.

Int. 5. Are you able to distinguish complainants' article from the meats previously in the market; and if so, what differences are there which enable you to so distinguish them?

A. I am. The complainants' meat is pressed into the can in a solid state, without any liquor; the other or older meats are put in the can in pieces, with more or less liquor, and in taking it from the can it falls to pieces. The cans of the latter are not full; on the contrary, the complainants' cans are entirely full.

Int. 6. How did the complainants' article strike you and the trade generally when it was first introduced, both as regards the novelty and its merit?

A. I was very favorably impressed with the novelty of the goods, and was perfectly sure of the success of the sale of the goods.

Int. 7. How are complainants' goods esteemed by the trade?

A. Should say they are the most popular goods in the market; I I mean to say the sales have been unprecedented.

Int. 8. What effect, if any, has the introduction of the complainants' article had upon the demand for the kind of goods previously known?

130 A. Well, the goods previously known seem to have been about entirely ignored since these goods came into the market.

Int. 9. With what markets are you familiar, and to what markets does your testimony apply?

A. With the principal cities in New England, and I might say all cities in the United States. I know all about the markets in the British provinces and the West Indies and Azores. I have sold these goods in the British provinces, the Azores, and largely throughout New England.

(Signed) HENRY R. TUCKER.

No cross-interrogation.

Deposition of Augustus J. Fabens.

Int. 1. What is your name, age, residence, and occupation?

A. Augustus J. Fabens; am 25 years old; reside in Salem, Mass.; dealer in canned goods.

Int. 2. Are you a member of any firm in said business, and where, and how long?

A. Am a member of the firm of Pike and Fabens, at No. 72 Broad street, Boston. We succeeded the firm of C. D. Brooks. Was with Mr. Brooks as clerk since 1871.

Int. 3. Does your present firm can meats, and did C. D. Brooks also can meats during the time you were with him?

A. Yes. [To both questions.]

Int. 4. Have you seen the article of solid compressed cooked canned meats put up by the complainants in this cause, and when did you first see it?

A. I have; should say it was four or five years ago; couldn't tell exactly.

Int. 5. Have you since dealt in it?

A. We have.

Int. 6. How has it been received by the trade?

A. Very favorably.

Int 7. How was it regarded by the trade when first introduced, as regards novelty?

A. It was regarded as an entirely new thing, different from anything then in the market.

131 Int. 8. Had you ever previously seen any article of solid compressed meat similar to the complainants'?

A. No; I don't think I had.

Int. 9. Were you familiar with the meats in the market at the time of the introduction of the complainants' article?

A. Yes; in this market here.

Int. 10. When the cans of the old and of the complainants' meat were opened, what difference, if any, was there between them?

A. The old kind the meat appeared to be cut into pieces and put in the cans; there was more or less liquor to it. The other was pressed solid in the cans. In the old cans the meat came out loose in pieces or slices. There was no liquor in the new cans.

No cross-interrogations.

(Signed) AUG. J. FABENS.

Deposition of Cyrus Dupee.

Int. 1. What is your name, age, residence, and occupation?

A. Cyrus Dupee; am 51 years old; reside in Boston, Mass.; am a wholesale salt-provision dealer.

Int. 2. How long have you been in your present business, and where?

A. Twenty-six years; at No. 40 South Market street, my present place of business.

Int. 3. Have you dealt in canned meats; and, if so, during what portion of the time?

A. I have. I should say I have dealt in canned meats for the past ten years.

Int. 4. Have you seen the article of solid compressed meat put up in hermetically-sealed cans by the complainants; and, if so, have you handled the same?

A. I have.

132 Int. 5. Have you seen or handled any of the canned meats put up previous to the introduction of the complainants' article?

A. I have.

Int. 6. How was the complainants' article received by the trade when it was first introduced?

A. We all of us looked upon it as a new article, and, being put up by a responsible house, we had greater confidence in it than we had in meats being handled previous to this being introduced on the market, and we put it out to our trade believing that it was as good an article as could be made. We had abandoned the trade in other brands.

Int. 7. Did you ever see, previous to the introduction of the plaintiffs' article, any solid compressed cooked meat put up in its natural state in sealed cans, like the complainants'?

A. I have not.

Cross-interrogatory:

X-int. 1. Where have you been engaged in business during the time you have dealt in canned goods, with what firms, and the name of such firm or firms?

A. In Boston, at my present place of business. I have been with Wooster, Dupee & Co. for twenty-four years.

X-int. 2. Have you been acquainted with various firms who have put up canned meats in New England and the Eastern States during that time, and have you been acquainted with the article of canned meats put up therein during the past twenty years?

A. To the first question I should say I have not; at least I could not remember without referring to my books. To the second branch of the question I should answer I have.

X-int. 3. Had you ever seen any of the meats put up in solid compressed form like the complainants' previous to seeing that put up by the complainants?

A. Well, I think not.

(Signed) CYRUS DUPEE.

133 *Deposition of James P. Smith.*

1. Q. What is your name, age, residence, and occupation?

A. James P. Smith; age, 36; importer and fancy grocer; residence, New York City.

2. Q. How long have you been in your present business, and where?

A. About eighteen years, in New York City.

3. Q. Have you during that time dealt in canned meats; and, if so, during what portion of the time, and to what extent?

A. During most of the time I have, to a large extent.

4. Q. Are you a member of any firm at the present time; and, if so, what firm; and state what other firms you have been connected with, if any?

A. Yes; senior member of the firm of Smith & Vanderbeek at present—formerly of the firm of G. G. Yevlin & Smith.

5. Q. Have you handled the article of solid compressed meat put up by the complainants in this cause, and when did you first see it, if at all?

A. Yes sir. I saw it when it first came out.

6. Q. Previous to that time had you ever seen any similar article of solid compressed cooked meat in sealed cans?

A. Nothing exactly of that nature.

7. Q. How did the complainants' article strike you and the trade generally when it was first introduced, as regards novelty and merit?

A. I considered it both novel and a good idea. It was introduced quicker than any other article I ever saw. It was really remarkable how readily it took.

8. Q. Do you know what effect, if any, the introduction of it has had upon the demand for the kind of goods previously known?

A. Before its introduction meat in cans was sold to very little extent. Since its introduction the demand has been very great.

134 9. Q. Have you any knowledge of any of the foreign markets for these goods; and, if so, please state what you know?

A. I have seen the goods sold in Great Britain and France, and understand from other parties they were largely imported by those countries.

10. Q. I would like to have you state how you gained such knowledge.

A. By my visit there.

(Defendant's counsel objected to last question on ground that it is hearsay evidence.)

Cross-examination waived by defendant's counsel.

JAMES P. SMITH.

Deposition of Horace K. Thurber.

1. Q. What is your name, age, residence, and occupation?

A. Horace K. Thurber; am 50 years of age; a grocer by occupation; residence, No. 146 West 12th street, New York City.

2. Q. With what firm are you connected, and how long have you been in your present business?

A. My firm is H. K. & F. B. Thurber & Co., and I have been in the grocery business about thirty years.

3. Q. Have you handled canned meats during that time; and, if so, specify the principal kinds?

A. The great bulk of canned meats that we have handled was corned beef made by the Wilson Packing Co., since the fall of 1874 and beginning of 1875. Prior to that time I never saw corned beef put up in cans until the fall of 1874. Before that time, for ten or fifteen years, we had handled in small volume roast beef in cans.

4. Q. Previous to the fall of 1874 had you ever seen any solid compressed cooked meat put up in sealed cans, like the complainants articles?

A. I had not.

135 5. Q. How did the complainants' article strike you and the trade generally, as regards novelty and merit, when it was first introduced?

(Objected to by defendant's counsel.)

A. It was a new article of merchandise to me, put up in a convenient form, and was in a very desirable shape to use as a convenient article of food, and the result of the sale of this beef in cans showed that it supplied a want for a great many purposes: for use on shipboard, as a convenient article for excursion parties, and also for home use in the family. It was convenient, and the quality was very excellent. The sale became very large at once. No new article that I ever attempted to introduce to the trade sold more readily or was approved of more generally than this article of compressed corned beef in cans.

6. Q. Have you sold these goods outside of the United States as well as in it; and, if so, state a few of those outside markets?

A. I have sold in the West India Islands, South and Central America, Australia, and in Germany also.

7. Q. How does the amount of business done by your firm compare with other merchants in the same line in New York City?

A. I think we are the largest grocers in New York City.

Cross-examined by defendant's counsel:

8. Q. In what way were the canned meats of which you have a knowledge prior to 1874 put up so that they differed from the meats put up by the complainants?

A. Prior to 1874 I never have seen any solid compressed boneless corned beef put up in cans. All the meats that I knew of prior to 1874 was roast beef that was either cooked in the can or cooked before being put in the can, and it was not solid like the Wilson corned beef. The juices of the meat and water were in the cans filled prior to 1874.

136 Redirect:

9. Q. Do I understand you to say that prior to 1874 you had never seen any article of solid compressed cooked meats in cans?

A. Yes, sir; I never had.

HORACE K. THURBER.

Deposition of Ruluf Lyles.

1. Q. What is your name, age, residence, and occupation?
A. Rufus Lyles; age, 57; residence, No. 33 Brevoort Place, Brooklyn; business, grocers' sundries, 87 to 89 Park Place, New York City.
2. Q. With what firm are you connected?
A. Bogle & Lyles.
3. Q. Have you dealt in canned meats?
A. Yes, sir.
4. Q. Are you familiar with the article of solid compressed cooked meat put up by the complainants?
A. Yes, sir.
5. Q. Do you remember when the complainants' article was first introduced; and, if so, please state how it was esteemed by yourself and the trade generally, as regards novelty and merit?
A. I remember its first appearance, though I can't give date. It was appreciated, sold freely with us, and gave satisfaction.
6. Q. What effect, if any, upon demands for the old meats has the introduction of the complainants' article had?
A. It has almost entirely driven it out.
7. Q. Previous to the introduction of complainants' article had you ever seen or heard of any solid compressed cooked meat put up in hermetically-sealed cans, similiar to complainants' article?
A. I do not recollect any.
8. Q. How long have you been engaged in your present business?
137 A. Since 1864.
9. Q. During that time have you been familiar with the various kinds of canned meats which were upon the market?
A. Yes, sir.
Cross-examination by defendant's counsel waived.

RULUF LYLES.

Deposition of Edward C. Hazard.

1. Q. What is your name, age, residence, and occupation?
A. Edward C. Hazard; age 48 years; residence 36 Grove street, New York City; wholesale grocer.
2. Q. With what firm are you connected, and how long have you been in the grocery business?
A. With E. C. Hazard & Co. I have been the grocery business since 1850.
3. Q. Have you dealt in various kinds of canned meats?
A. All of them.
4. Q. Are you familiar with the article of solid compressed cooked meat put up by the complainants?
A. I am.
5. Q. How did said article strike you when you first saw it, as regards novelty and merit?
A. It struck me as being a new and original article. As regards merit, it is a first-class article.
5. Q. How has it been received by the trade?
A. Very enthusiastically.
7. Q. How, if at all, has it affected the market for the kinds of canned meats previously known?
A. It has entirely superseded the sale of the other articles.

8. Q. How does your firm rank as regards the amount of its business?

A. We do a large business.

Cross-examination by defendant's counsel waived.

E. C. HAZARD.

138 *Deposition of Samuel W. Allerton.*

1. Q. What is your name, age, place of residence, and occupation?

A. My name is Samuel W. Allerton; age 50 years; Chicago; my occupation is shipping cattle and packing hogs.

2. Q. How long have you been engaged in this business?

A. Twenty-seven years, I think.

3. Q. Have you been acquainted with the conditions of the market and the prices of the different grades of beef cattle for the last four or five years?

A. Yes, sir.

4. Q. How many cattle, as a general statement, are you accustomed to handle annually; say during the last four or five years?

A. Oh, from seventy to ninety thousand annually.

5. Q. Will you state what are the various classes or grades of cattle, as they are known and called in this market? Please give the name of these classes.

A. Well, nominally, they are called—best grades are English shipping cattle; next grade would be New York and Boston shipping cattle; the next would be the packing grade of cattle, and then butchers' cattle.

6. Q. Will you state what has been the tendency of prices of the grades above the packing grade, since the year 1873 or '74 up to the present time, giving, if you can, some idea of the changes in price, if any, from year to year?

A. The general tendency of all grades have been downward, but more particularly on first-class shipping grades. Packing grades not so much. The first-class cattle has declined in price about 35 per cent. in the last four years; but the packing grades only declined about 10 per cent.

139 7. Q. Will you state, if you please, what, in your opinion, is the reason that the packing grades have declined so much less in price than the shipping or higher grades. To what cause do you attribute the difference?

(Objected to.)

A. I should think that the real cause was the canning of cattle, and disposition on the part of farmers to buy stock cattle. There is no doubt the real cause is the large amount of cattle canned in this market. I think that these canning companies, paying cash for the cattle, is another cause of high prices for their grade of cattle.

8. Q. By the canning business you refer, do you not, to the business of the Wilson Packing Company and Libby, McNeil & Libby?

A. To them largely, and to other canning companies.

9. Q. Will you state how long the shipping of cattle to England has been carried on, as near as you can?

A. To a limited extent it has been carried on as far back as 1868, but to any extent only about two years.

10. Q. Would not the use of from one to two thousand head of cattle a day in the canning business be sufficient to produce an effect on the price of that grade in this market?

(Objected to.)

A. Of course it would. I think if it was not for the shipping of the English cattle and the canning business, I think the price of cattle would be lower than hogs.

Cross-examination waived.

SAMUEL W. ALLERTON.

Deposition of Nelson Morris.

1. Q. What is your name, age, place of residence, and occupation?

A. My name is Nelson Morris; 39 years of age; live in the city of Chicago, and am a dealer in cattle.

140 2. Q. How long have you been in this business, and how many cattle do you annually handle, as near as you can estimate the number?

A. I have been in the business twenty-three years. I average about sixty-four to sixty-five hundred cattle a week. My business amounts to about thirteen or fourteen millions per annum, or over three hundred thousand cattle annually.

3. Q. Will you name the chief grades or classes of cattle, as they are known and rated in this market?

A. Yes, sir; first, there is the English shipping cattle; next, there is New York shipping cattle, Boston and New England; then there is packing cattle; then there is butchers' cattle, and stock cattle for feeding.

4. Q. Will you give the tendency of prices in this market of these various grades, for the last four or five years, and state, as nearly as you can, what the tendency has been with each grade, and what change of price has taken place with the same in each grade?

(Objected to.)

A. There has been a steady decline for years past on all grades of cattle, but packing cattle has suffered the least decline, on account of steady and healthy demand for canning purposes. Had it not been for the healthy use of canning, as the country west has grown so fast, and are raising, as a general thing, all that class of cattle, or a good part of that class of cattle, this grade of cattle could not find an outlet, as beef packing in barrels and tierces, which used to be carried on here to a large magnitude, is abandoned, and that the beef-packers in former years took all the surplus of the packing cattle, the price of these class of cattle would be so low that the western producer would have to abandon raising them.

5. Q. Will you state why the old form of packing in tierces and barrels was given up?

(Objected to.)

141 A. At the time when this beef-packing business in pickle was carried on, the parties who packed this beef, which had to be kept for a great length of time, they salted it so strong that the product got as hard as a flint nearly, and it could not be sold except at sacrifice prices; and I myself had it sold in Boston at a price which did not pay cost of transportation, commission, and storage.

Cross-examination waived.

NELSON MORRIS.

Deposition of Wilson T. Keenan.

1. Q. What is your name, age, residence, and occupation?

A. My name is Wilson T. Keenan; aged 42 years; place of resi-

dence, Chicago, Ill. My occupation is that of live-stock commission merchant.

2. Q. How long have you been in this business, and how many cattle have you bought and sold annually, say during the last four or five years?

A. I have been in the business twelve years, and have sold about, on an average, thirty thousand head of cattle in a year.

3. Q. Are you acquainted with the different grades of cattle in this market; and, if so, will you state what the leading ones are?

A. I am. The first grade we term European cattle; second grade, New York cattle; third grade, Boston and New England cattle; fourth grade, packing cattle; fifth grade, butcher cattle. That's the way I generally classify them in my circulars.

4. Q. Will you state what has been the tendency of prices of all grades within the last four or five years, and what difference, if any, there has been in the changes of the prices of the different grades?

142 A. The tendency has been downward. Shipping grades have declined about 35 per cent. at least; packing grades, which includes Texas and western cattle, from 5 to 10 per cent.

5. Q. To what do you ascribe the smaller decline of price in the packing grades?

(Objected to.)

A. Well, my idea would be that the prices are governed by the supply and demand, and since this packing of canned meat has become an established business the demand has been enlarged for that class of cattle, and oft'imes the demand has been larger than the supply.

6. Q. How was beef formerly packed for transportation before the introduction of this canning process?

(Objected to.)

A. In barrels and tierces.

7. Q. Does this method continue to be practiced now; and, if not, why has it been abandoned?

(Objected to.)

A. No. My idea is that the present process of canning meats creates a better demand for that kind.

Cross-examination waived.

WILSON T. KEENAN.

Deposition of George Adams.

1. Q. What is your name, age, place of residence, and occupation?

A. My name is George Adams; age, 47; I reside at Chicago, Illinois; my occupation is that of selling live-stock on commission.

2. Q. How long have you been in this business and how many cattle have you disposed of annually during the past four or five years?

143 A. Seventeen years. I have disposed of about seventy-five thousand head of cattle annually, probably more—I guess it would run up to one hundred thousand.

3. Q. Will you state what has been the tendency in price of all grades of cattle, and what has been the relative decline, if any, of the several grades?

(Objected to.)

A. The cattle we ship to Europe would come under the first grade, and which grade has declined about 35 per cent. The next would be the shipping grades to New York, Boston, &c., east, and they have declined about the same. Then comes the packing cattle; there has not

been any particular change during the past four or five years, and has not depreciated in value as much as the other stock. Butchers' stock has not declined so much as the shipping grades, because the packing of canned beef has taken the packing grades out of the way and so made room for the butchers' grade, and enabled them to hold their price. If the packers of canned meats would withdraw from the market for one week, the prices of butchers' grade would decline 50 cents per hundred pounds, and on their reappearance in a few days it would work back again.

4. Q. Has such an occurrence as the cessation of the purchase of the packing cattle by the packers of canned meats ever taken place in this market to your knowledge?

(Objected to.)

A. Well, for a few days they have been out of the market at different times, and we felt it immediately.

Cross-examination waived.

GEORGE ADAMS.

144 *Deposition of Charles Thompson.*

1. Q. What is is your name, age, place of residence, and occupation?

A. My name is Charles Thompson; my age is 27 years; residence, Chicago, Illinois; occupation, cattle-dealer.

2. Q. How long have you been in this business and how many cattle have you handled annually within the last four or five years?

A. I have been in this business twelve years. I have handled on an average of thirty thousand head of cattle annually.

3. Q. What change, if any, has taken place in the different grades of cattle in this market within the last four or five years, and what is the difference, if any, in the changes of the different grades?

A. In first and second grades it has depreciated about 35 per cent.; packing grades I should judge 10 per cent.; the butchers' grade of cattle I should think about the same as packing grades. The consumption of the packers' grade by the packers of canned meats has had the effect to keep up the prices of the butchers' grade.

4. Q. What, in your opinion, is the cause of the holding up of the price of packers' grade of cattle?

A. Under the present process of canning meat the meat is worth so much more for this purpose than under the old method of packing beef in barrels and tierces, consequently there is a greater demand for it, which keeps up the prices.

5. Q. What, in your opinion, would be the effect upon the market of this class or grade of cattle if this branch of industry, the canning of meats here, should be withdrawn?

A. I do not think it could be sold for enough to pay the cost of transportation and general expenses of shipping from the ranche where the cattle are raised to this market.

145 6. Q. Would, in your opinion, the old method of packing beef enable this class of cattle at the present time or for the past three years to have been sold at any profit in this market?

(Objected to.)

A. We couldn't dispose of half of the cattle if they were to be packed under the old method.

Cross-examination by F. W. TOURTELLOTTE:

1. X Q. Do you know how many cattle were packed under the old method prior to 1874?

A. I couldn't tell. In my opinion it was very small compared to the present process.

2. X Q. Do you know what effect the packing of cattle under the old method had on the price of cattle in this market?

A. I could not explain the effect it would have.

3. X Q. Do you know whether it raised the price of cattle or not?

A. Well, a demand from any source will have the effect of raising the price of any cattle.

4. X Q. Then you have no knowledge of your own of the effect on the market of packing cattle under the old method?

A. Well, I have a general knowledge of business; I couldn't give you any points on packing, because I am not a packer.

5. X Q. Were you acquainted with the price of cattle in this market at the time packing was carried on under the old method?

A. Yes.

6. X Q. What effect would the stoppage of packing under the old method have upon the price of cattle in this market if continued for a week or any considerable length of time?

A. It would reduce the price of cattle, I should judge, 50 cents per hundred pounds.

CHARLES THOMPSON.

146 *Deposition of Samuel E. Wood.*

1. Q. What is your name, age, place of residence, and occupation?

A. My name is Samuel E. Wood; 40 years of age; residence, Hyde Park, Cook Co., Ill.; occupation is live-stock broker.

2. Q. How long have you been in this business, and how many cattle have you handled annually, say in the last four or five years?

A. About twelve years, and have handled about seventy thousand head of cattle annually.

3. Q. What change, if any, has taken place in the prices of the different grades of cattle in this market within the last four or five years; and in what class or classes has there been the least and in which the greatest alteration?

(Objected to.)

A. The change has been a general shrinkage in the value of cattle. The first-class cattle have suffered in proportion the greatest decline. I should say that the class of cattle known as packing cattle, used for canning purposes, and butchers' cattle, sustain nearly an equal decline, and suffered much less than the shipping grade of cattle.

4. Q. What, in your opinion, is the cause of the fact that the cattle used for canning purposes have maintained a better price than the higher grades?

(Objected to.)

A. We attribute the cause, as sellers of cattle here, that was apparently created from what is known as the canning branch of the business.

5. Q. Will you state who are the largest buyers of beef for canning purposes in this market?

(Objected to.)

A. Libby, McNeil & Libby are considered as the largest purchasers, and the Wilson Packing Co. as the next.

147 6. Q. Will you state whether the packing of beef in barrels and tierces has been discontinued, and, if so, when, as nearly as you can state?

A. It's my judgment that it has been discontinued about four or five years ago.

Cross-examination waived.

SAMUEL. E. WOOD.

Deposition of Isaac Waixel.

1. Q. What is your name, age, place of residence, and occupation?

A. My name is Isaac Waixel; my age is 48 years; I reside in Chicago; occupation is cattle-dealer.

2. Q. How long have you been in the business, and how many cattle have you handled annually within the last four or five years?

A. I have been in the business since the winter of 1857 and '58. I have handled about one hundred thousand head annually.

3. Q. What change, if any, has taken place during the last four or five years in the prices of the different grades of cattle; and which grade has changed in the least degree?

A. Prices have declined. I think the grade called packing grade, used for canning meats, has declined in the least, while all other grades have declined more. Stock cattle have not declined so much.

4. Q. What is the cause of the grade of cattle used for canning meat not feeling the decline as much as the other upper grades? If there exists any cause, in your opinion, in the city of Chicago, please so state.

A. Well, I suppose it's the demand for canning purposes by Libby & Wilson.

Cross-examination waived.

ISAAC WAIXEL.

148 *Deposition of John Adams.*

1. Q. What is your name, age, place of residence, and occupation?

A. My name is John Adams; aged 57; place of residence, Chicago; occupation, live-stock cattle salesman.

2. Q. How long have you been so engaged in such business, and how many head of cattle have you handled annually within the past four or five years?

A. I have been engaged in such business 17 years in this city. I have handled about thirty thousand head, a little more, annually.

3. Q. What has been the tendency of prices of the different grades of cattle during the last four or five years; what grade has suffered the least change, and what in your opinion has made such grade more steady than the other in price?

A. The tendency has been downward. I think those grades used for canning beef and packing cattle has suffered the least. The increased demand for that grade of cattle has made that grade suffer less than the others.

4. Q. What, in your opinion, has produced the increased demand in that class of cattle?

(Objected to.)

A. Because they are used for the purpose of canning meats. We can more and pack less in barrels and tierces than formerly.

5. Q. Suppose the canning of meats as practiced at present by the Wilson Packing Co. and Libby, McNeil & Libby were to cease, would, in your opinion, the old method of putting up in barrels, &c., suffice to consume a supply of cattle of the packing grade equal to what now generally exists in this market?

A. I think not, sir. I don't think it would be possible to sell them for that purpose at all.

149 6. Q. What, in your opinion, would be the effect on the market in that grade of cattle if such a change as indicated in the last question were to take place at this time?

A. I think it would result in serious damage to the cattle-raisers.

Cross-examination waived.

JOHN ADAMS.

Deposition of Lewis R. Hastings.

1. Q. What is your name, age, place of residence, and occupation?

A. My name is Lewis R. Hastings; age is 46 years; place of residence, town of Lake, Cook County, Illinois; occupation, live-stock salesman.

2. Q. How long have you been in the business, and how many head of cattle have you handled annually during the past four or five years?

A. I have been in the business in Chicago ever since 1859. I have handled from about seventy-five thousand to ninety thousand head a year.

3. Q. How is the market for cattle at the present time, as compared with its condition 5 years ago?

A. All grades of cattle except the smallest and packing cattle have declined. The first or shipping grade has declined more than the packing and butchers' grade.

4. Q. What, if anything, has produced the steadiness in the price of packing grade of cattle?

A. We think that the canning business has kept up the price on such.

5. Q. Do you refer especially to the business conducted by these complainants?

A. Those two parties have bought the most of my cattle; yes, sir.

150 6. Q. Are you acquainted with the amount of cattle which were packed in former times in barrels and tierces annually; and, if so, state the amount and general terms?

A. I couldn't state the number, but should say that considerable more are packed in the cans than used to be packed in the barrels and tierces formerly.

Cross-examination waived.

LEWIS R. HASTINGS.

Deposition of James McLean.

1. Q. What is your name, age, place of residence, and occupation?

A. My name is James McLean; age, 33 years to-day; place of residence, Chicago; occupation, agent of Phelps, Dodge & Company, New York, largest importers of tin plates in the United States.

2. Q. How long have you been employed in this capacity, and how long in the sale of tin plates to packers of hermetically-sealed goods in the United States?

A. I have been employed in that capacity three years next April. To the latter part of the question I say nine years. When I went with Phelps, Dodge & Co., three years ago, I was the largest importer of tin plates in the United States.

3. Q. Have you, prior to 1874, as a general thing, sold tin to the packers of canned goods in New York and New England and the other parts of the United States?

A. Yes.

4. Q. Are you acquainted generally with the comparative amounts of tin used by such packers prior and subsequent to 1874?

A. Yes.

151 5. Q. Will you state whether the amount of tin consumed by meat-packers has increased or diminished since 1874, and in what degree, as nearly as you can?

(Objected to.)

A. It has increased, certainly, in number of boxes—estimated from fifty to seventy-five thousand per annum, and in value from three hundred and fifty thousand to five hundred thousand dollars. I am speaking of the tin plates alone.

6. Q. Will you state, if you know, where the chief market has been for this increased sale, and by what class of packers, if any, the enlarged amount of plates has been consumed?

(Objected to.)

A. Chicago and St. Louis; the packers, Libby, McNeill & Libby, the Wilson Packing Co., and the St. Louis Beef Canning Co. The Chicago Meat Preserving Co. might be included also.

7. Q. Before the commencement of the packing and canning by these last-named companies, do you know, in a general way, what proportion of the tin plates sold by you to the earlier packers in this country was used for cans to contain meats? If so, please state, in such terms as your information will warrant.

(Objected to.)

A. We never sold any tin to the earlier packers, knowing it was to be used for other meat beside lobster, oysters, and poultry.

Cross-examination waived.

JAMES McLEAN.

Deposition of John A. Wilson.

1. Q. What is your name, age, place of residence, and occupation?

A. My name is John A. Wilson; age, 39 years past; residence, Chicago, Ill.; am secretary and treasurer of the Wilson Packing Company, one of the complainants.

152 2. Q. Are you acquainted with the class of canned meats such as have been put up in this country prior to 1874 by such packers as Kemp, Day & Co., New York, Wm. Underwood, of Boston, and J. W. Jones and others in Maine?

A. I have seen various samples of the canned meats of the packers named.

3. Q. Were you present at the examination, as witnesses in this case for the respondents, of Wm. Underwood and John Irvine, with Kemp, Day & Co., and did you or not examine samples, which were opened, of canned meats like "Defendant's Exhibit Underwood's Beef" and "Defendant's Exhibit Kemp, Day & Co.'s Meat," at those examinations?

A. I was present at the examination mentioned and did see the meats spoken of.

4. Q. Will you describe the characteristics and condition of those meats on the opening of the cans at the examination referred to?

A. The can of meat exhibited by Underwood appeared to be pieces of beef in a cooked state, lying loosely in the can, with the interstices filled with melted tallow, so that the can was nearly but not quite filled with beef and tallow. The can of meat exhibited as Kemp, Day & Co.'s meat was partially filled with cooked beef, and the remainder of the can filled with a soft, semi-fluid, gelatinous substance, so that the whole contents of the can had a mushy appearance, and rather unsightly appearance as an article of food.

5. Q. Were there any indications that compression had been used with an intent to compact the contents of the cans into a solid, coherent mass?

A. From the appearance of the contents there was no indication that any compression had been used for any purpose.

Q. 6. State whether, on the opening of the cans, the contents came from the same in the solid form of the interior of the can.

153 A. It did not from Kemp, Day & Co.'s meat. The Underwood can was opened but not emptied in my sight, but there was pieces of it taken out, so that I was enabled to see the condition of the contents.

7. Q. Are you acquainted to any extent with the amounts in which this class of canned meats has been prepared prior to 1874 or 1875, either absolutely or relatively, and where the markets for the same have chiefly been?

A. My information on that subject has been derived from publications known as Market Reports, and statistics furnished in that class of reports. From such information I learned that there was quite a large quantity of that class of canned meats prepared in Australia and South America, and to some little extent in the State of Texas; and the principal markets for those goods were in England; in fact, the primary market was England, although there was considerable of the goods sold and consumed on the European continent.

8. Q. Will you state if any portion of your product, and what proportion, finds foreign market, and where, in general terms?

A. A very large proportion of our goods, our canned meats, find their market in foreign countries. It would be difficult for me to state what portion of the globe our goods have not found their way into, for they are in great favor all over the world.

9. Q. When did the export of your product fairly begin?

A. There was some of our goods exported in 1874—the fall or winter of 1874—but the quantity was small. The large export began in 1876, although various parcels were sent from time to time during the year 1875. Our facilities for packing great quantities for export were not fully completed until the year 1876.

10. Q. What, if any, class of canned meats did your goods meet in the foreign market?

154 A. Our goods went into competition with the goods prepared under the well-known Durand or Appert process.

11. Q. Will you state, if you know, where these goods were generally prepared?

A. I have stated that they were prepared in Australia and South America principally.

13. Q. Since the year 1876 what has been the result of the competition in the foreign markets between the compressed meats prepared under the complainants' patents and the earlier class of goods of which you have spoken?

A. At the time when our goods were put upon the markets in Europe the goods prepared under the old method were sold at prices varying from six-pence to eight-pence, sterling money, per pound, and they declined in price rapidly, so that many brands of these goods sold as low as three-pence per pound, while our goods brought an average price of about eight-pence per pound, and the best grades of brands of the non-compressed goods would not bring over five-pence or perhaps six-pence sterling per pound; with the result, finally, that that class of goods have about disappeared from the markets, so that at the present time

they could not be purchased in any considerable quantities, and the demand for the compressed meats have steadily increased, notwithstanding the great depreciation that has occurred lately in the value of nearly all kinds of provisions.

13. Q. Calling your attention to the domestic market, please state, in general terms, what amount of the non-compressed meats were disposed of here at the time of the appearance of your goods; by whom those were put up; what has been the result of that competition, and what the growth, if any, of your domestic trade since that time.

A. Since the late war for the Union the quantity of canned meats prepared under the old method has been very inconsiderable;
155 and they were prepared by such persons as Wm. Underwood, spoken of; W. K. Lewis Brothers; Kemp, Day & Co., of New York; Portland Packing Co.; J. Winslow Jones; Burnham & Morrell, of Portland, Maine, and perhaps a few others. If there was any competition we certainly have not felt it, and the growth of our trade in this country has been enormous, counting from the time when we first placed our goods on the market in 1874. I presume we have packed more canned meat in a single week's time than all the manufacturers and packers before mentioned, under the old method, have packed in a year's time since the introduction of our goods.

Cross-examination by Mr. TOURTELLOTTE:

1. X Q. Do you know the cause of the tallow being in the can of meat put up by Underwood & Co., mentioned by you in your answer to interrogatory of your direct examination?

A. Do you mean the primary cause of the tallow?

2. X Q. Yes; if you desire to explain in that way.

A. As I understand, I should presume it had been placed there, or it would not be there.

3. X Q. Do you know whether or not it was placed there separately from the meat?

A. I could not state whether the meat was put into the can before the tallow was, or afterwards, or at the same time.

4. X Q. Are you prepared to state that the tallow which you say you saw in the can was not the melted fat from the meat after it was placed in the can?

A. It certainly had the appearance of having been melted, but whether it was melted before being placed in the can or afterwards I could not state, as I did not observe any of the usual tissues or cells which ordinarily contain the fat of animal matter.

5. X Q. If beef interspersed with fat was placed in a can and
156 processed in such a degree of heat as to cook the meat thoroughly, what would be the condition of the fatty substance after being cool; would it remain interspersed with the lean portions of the meat or would it be separated from it?

A. Do you mean meat in a cooked or raw state before being placed in a can?

6. X Q. In a raw state.

A. I should say that uncooked meat and fat upon being subjected to a high degree of heat for a considerable time would unquestionably render the fat into tallow, and separate it from the cells which contain the fatty matter.

7. X Q. Would or would it not present in a can, when cool, the same appearance as noticed by you in the Underwood beef, which you say you saw opened?

A. The Underwood can of meat appeared to me to have been the re-

sult of the cooking, at a very high degree of heat, at more than the temperature of boiling water, of raw meat and fat, and of course the tallow contained therein did present the appearance mentioned in my previous answer.

8. X Q. What knowledge had you of the foreign market, if any, beside from market reports?

A. From a very extensive correspondence with dealers in canned meats in foreign markets.

9. X Q. In what countries have you sold your meats, either directly or indirectly?

A. We have sold directly some of the leading houses of this class of goods in England, in Scotland, in Ireland, in France, in Germany, in Austria, in Norway, in Sweeden, Italy; perhaps some other countries that I do not recollect we have sold directly, and many other countries indirectly or through our agents in the countries mentioned.

JOHN A. WILSON.

157 *Deposition of Arthur A. Libby.*

1. Q. What is your name, age, place of residence, and occupation?

A. My name is Arthur A. Libby; age, 47 years; I am engaged, as member of the firm of Libby, McNeill & Libby, in the meat-canning business; my residence is at Chicago, Illinois, and am one of the complainants.

2. Q. How long have you been engaged in the beef-packing business?

A. About twenty-six years.

3. Q. Will you describe briefly the manner in which beef was packed prior to 1874?

A. 'Twas packed in barrels and tierces, the cask being filled with pickle in which the meat was preserved.

4. Q. To what extent was this method practiced prior to 1874 at this place, and when, if at all, did it cease to be followed substantially?

A. The largest number of cattle packed under this method occurred in the season of 1864 and '5, the number of cattle being packed at the time being 92,450 head. It ceased to be followed substantially in the year 1870.

5. Q. Will you give the reason for the decline of this method of preserving beef?

A. It was owing to the fact that the salted beef reached the consumer in a very unsatisfactory condition; the salt withdrew the juices from the meat, and after a lapse of a few months it became hard, black, and was then generally known as salt junk.

6. Q. Did or not the demand for this article of meat decline or fail on account of this quality of the article as you have described?

A. It did.

158 7. Q. When did you begin the preparation of canned meats in the market, foreign and domestic, under the complainants' patents?

A. In the summer of 1875.

8. Q. To what extent has the consumption of cattle for this purpose been carried to supply the complainants or yourselves with materials for packing?

A. We have purchased and used for this purpose for the past six months over 100,000 cattle—we mean our firm alone.

9. Q. What kinds, if any, of preserved beef and other meats did your product meet with in the foreign and domestic markets; to what

extent, in general terms, was the article in the market, and what was the result of the competition?

A. Canned meats packed under all the old processes, such as Appert's and Durand's, John McCall's, and many others, packed in Australia, South America, Great Britain, Texas, and other places. These articles were in the market to a very large extent at that time. The result was that meat put up under these processes became unsalable, except at a sacrifice of about fifty per cent.

This was the result of the competition produced by our compressed meats being put upon the market, and considered far superior to the meat put up under the old method.

10. Q. Were you present at the taking of the depositions of Wm. Underwood and John Irving, and did you or not examine opened specimens of canned meat stated by those witnesses to be the same as Defendant's Exhibits Underwood and Kemp and Day Meats?

A. I was present and did examine such specimens.

11. Q. Did you or not see the Kemp and Day meat emptied from the can, and will you state in what condition it issued therefrom when the can was inverted, and whether, from your examination of the Underwood meat, that would, in your opinion, come from the can in any different condition?

159 A. I examined the can of Kemp & Day meat, when opened, and saw it emptied out of the can. The meat in the can had a peculiar brownish look, and was surrounded with a gravy of the same color, and upon turning it out of the can it issued from the same in detached portions. The can, when opened, was partially filled with meat in a loose condition, and it is my opinion, from a close examination of the Underwood meat, that would issue from the can in the same condition.

12. Q. Were you present at the taking of the deposition of Henry Lee Borden, a witness examined on behalf of respondent, and did you hear his description of a method of preparing and canning meat practiced by him in Texas?

A. I was present, and did hear him give the description.

13. Q. Will you state, from your experience in the canning of meats, what would be the effect of the mincing or grinding process, and the subsequent pressure into the can upon the meat, as described by that witness?

A. From my experience I should say that under such a process that the fibres of the meat would be all destroyed by the fine chopping or grinding, as explained by Mr. Borden, and that such an operation would drive out a large portion of the juices, and when pressed together it would be in a gelatinous, gummy state, similar to head-cheese.

14. Q. Will you state what is the condition, as distinguished from this, of the compressed meats prepared under complainants' patents by the complainants in this case?

A. In our compressed meats the fibres are in their natural condition, and the pressure simply forces the fibres of the different pieces in and among each other, and so holds them together and forms a cake of meat with the fibres in the natural condition of cooked meat, thus retaining all the nutritious elements and juices of the meat, which conditions are not to be found in a ground-up, pulpy mass, as described by Mr. Borden.

Cross-examination waived.

ARTHUR A. LIBBY.

160 *Deposition of John A. Wilson, recalled.*

1. Q. In your former examination I omitted to ask a single question, by inadvertance, which I will now put to you, and desire you to make your answer thereto as a part of the same deposition: What, if anything, did Henry Lee Borden, before referred to, state to you as a description of the machine in which his pemmican or chopped preserved meat was first cut up? State fully.

(Objected to.)

A. He said it was a powerful six-horse-power rotary—a cylindrical sausage-machine. I asked him if it was the ordinary cylinder, with fixed knives and iron teeth to press the meat between the knives, and he said that it was.

Cross-examination waived.

JOHN A. WILSON.

Deposition of S. Dana Hayes.

Int. 1. Please state your name, age, residence, and occupation.

A. S. Dana Hayes; reside near Boston, in Massachusetts; I am 39 years of age; an analytical and technical chemist, and have held the office of State assayer in Massachusetts for the past fourteen years.

Int. 2. Will you state what experience and practice you have had in the explanation of scientific terms in letters patent, as a witness in the Federal courts—to what extent and how long?

A. All through my professional career of eighteen or nineteen years I have been almost constantly engaged in chemical investigations connected with causes upon trial. I have given evidence as chemical expert and in interpreting patents in the Federal courts many times each year of this experience.

161 Int. 3. Will you state specially what experience as an expert witness you have had in relation to the subject of preservation of food and hermetically-sealed goods?

A. During the past eleven or twelve years I have given seven or eight depositions and affidavits upon these subjects, and I have had occasion to make myself familiar with them by lab'ratory and practical work, as well as by reading and study, and I am frequently consulted by manufacturers, packers, and preservers of different articles of food.

Int. 4. Have you examined letters patent of the United States, reissue No. 6451, May 25, 1875, Division A, granted to W. C. Marshall, assignor to Arthur A. Libby, of Chicago, Illinois, as borne upon the printed record now shown you of the suit, The Wilson Packing Co. et al. v. William B. Clapp; and, if yea, will you state what process you understand to be described therein?

A. I have examined this patent, and think I fully understand the invention therein set forth. This patent is for a process for preserving meats, and I notice that the meat, before it is treated by the especial process covered by this patent, has first been subjected to some partial preserving process.

The process described looks to the preservation of meat in hermetically-sealed packages, and involves the use of the well-known Appert or Durand process. The especial process set forth in this patent consists of a heavy preliminary pressure applied to the meat to be preserved before it is put in the vessel in which it is hermetically-sealed. This pressure is employed as an agent of preservation, in order to ex-

pel air and moisture from the interior of the piece or pieces of meat themselves. There is then a second pressure when the meat is put into the preserving vessel, the object of which is, as the specifications set forth, to drive out air from that vessel, and make the meat agree in size with the size of the package or box it is intended to fill.

162 The substance of this patent is, in my judgment, the employment of compression as a preservative agent or means, by expelling the air and moisture.

Int. 5. Have you examined letters patent of the United States, reissue No. 6370, April 6, 1875, granted to William J. Wilson, of Chicago, Illinois, assignor to the Wilson Packing Co., as the same appears in the printed record referred to in the foregoing question; and, if so, will you state what process you understand to be described therein?

A. I have examined this patent, and think I understand it. It is a patent for a process for packing cooked meats for transportation in compressed form. The process is briefly as follows: The meat is first thoroughly cooked at 212°; the bone and gristle are then removed, and this unavoidedly separates the meat into small pieces. The meat is then, preferably while warm with the cooking, pressed into the can; first with the object of aiding in its preservation, which it does by expelling superfluous (unnatural or extraneous) moisture of the meat, and to expel the air, both from the interstices of the meat itself and from the can; and also for another object, which is to make the meat form a solid cake for use. This process differs from all those that have preceded it, except the Marshall, in these particulars. It uses compression upon the contents of the can, which contents have been peculiarly prepared by the abstraction of the innutritious parts, for three objects: first, as an aid to the preservation of the food, and second, to expel the air from the can, and thirdly, to present the food for consumption in a solid cake, in the attractive form of the package which contains it before it is put upon the table, the meat being neatly moulded like other attractive articles of food that are prepared in the kitchen.

No process that I am aware of, previous to the date of this patent, preserves cooked meats which were, before being canned, in a fragmentary form, more or less coarse or fine, where the integrity of

163 the meat and its fibrous structure were completetely preserved, where it retained its natural juices in the natural way, where it was not disintegrated or dessi'cated, and where the compression which was applied to it served to interlock the fibres of the individual pieces to such an extent that the meat would form one solid cake when the package is opened for use. This is not a patent for simply compressing meat; this has been done before; but it is a patent for compressing the meat in the preserving vessel in order that it may take a specific form and be given to the consumer in that form in a solid cake.

Int. 6. Have you examined letters patent of the Kingdom of Great Britain, No. 3372, 1810, granted to Peter Durand, for preserving animal and vegetable food? State generally what examination you have made of this patent altogether, and what process, in your judgment, for the preservation of food is described therein. And you may, if you please, state the similarities and differences which seem to you to exist between this process and the ones described in the two patents of the complainants to which you have referred?

A. I have repeatedly examined this patent, and think I understand it. It is the patenting in England of the Appert process, worked upon and probably originated by Gay-Lussac. It is a method of "preserving animal food, vegetable food, and other perishable articles a long

time from perishing or becoming useless," communicated to Durand by a foreigner. This is not a new subject to me, as I have several times had occasion to examine and study this Durand-Appert process in all its parts.

It is briefly a process for preserving food by the aid of heat in hermetically-sealed packges.

Heat expels air by its expansion, so that there is little or no air in contact with the article to be preserved in the preserving vessel or can, or the action of heat destroys the germs of fermentation or fermentative agencies that may remain in the package with the food, or the heat performs both of these offices. This is the whole substance
164 of the invention. The expulsion of air is important, but the change effected upon any air that may be remaining is more important to success in the use of this Durand-Appert process. It was a great discovery at the time it was made, and was the foundation of all the processes and patents for preserving food that have appeared since the early part of the nineteenth century. Inventors and scientific men have improved upon and enlarged this discovery since its first appearance.

The differences between the Marshall-Wilson and the Durand-Appert processes are several and important. First, in the Wilson process a compressed cake of meat is preserved, and to this there is no allusion in the Durand-Appert patent. Second, both the Marshall and Wilson patents describe meat carried beyond its natural density or solidity. This is a wholly new feature, so far as the Durand-Appert patents are concerned. Both Marshall and Wilson make use of the Durand-Appert process. They use the whole process of heating or canning, but there are other objects in view, which, in the Marshall patent, are: first, exposing the meat, after it has been partially preserved, to pressure as a means of removing the principal agents of putrefaction; and, secondly, subjecting the meat in the packages to pressure, for two purposes, to fill the can, and to drive out the air for the purpose of preserving the meat. Both of these distinctive features of the Marshall patent are different from anything found in the Durand-Appert patents. The application of pressure as a preservative means or agent is not mentioned in, and is new compared with the Durand-Appert patent.

Comparing the Durand-Appert patents with the Wilson patent, I find the distinctive feature of the latter to be in pressing the cooked meats while warm, preferably, into the can for three purposes: first to expel the air; second, to expel the superfluous moisture, and third, to make the meat form a solid cake, in order that when taken out of the can it will still preserve the form of the mould, which is the can itself.

This Wilson patent differs from Marshall's in this, that there is
165 no preliminary pressure of the meat before it is put into the can. Wilson's meat, cooked, warm, is fragmentary, plastic, and soft, so that it will cohere and individual pieces become interlocked, and thus form a solid cake when pressed into the can. There is no intimation whatever of this in the Durand-Appert patents. Durand and Appert preserved food in hermetically-sealed packages by heat. Marshall and Wilson's processes are very different from this.

In speaking of the Durand patent, my mind has naturally been carried to the original Appert process from which the Durand patent was derived, the latter being only one practical application of the Appert process. I have therefore spoken of Durand and Appert together.

As a partial corroboration of my statement that the Marshall-Wilson processes are new and very important when compared with the Du-

rand-Appert processes, and as showing that the product made when following the directions of the Marshall-Wilson patents is new and unlike any article of preserved meat previously known, I take the liberty of quoting the following paragraph from a printed journal handed me by Mr. Clifford, counsel for the complainant in this case.

(Objected to—i. e. the quotation from the journal mentioned.)

The title of this journal is "Annual Review of the Canned Goods and Preserved Provision Trade, by Dickson & Renwick, Glasgow, and D. W. Dickson & Co., Liverpool," dated "31st December, 1878," and under the heading "Compressed Meats," I find the following paragraphs: "Compressed meats demand more than passing notice, for we venture to say that in the history of the canned provision trade, never has a class of goods sprung so suddenly into public favor, displaced to such a great and continued extent other kinds of goods, or developed with such amazing rapidity as has that of compressed corned beef. Though yet less than three years since its introduction, it has not only gained
166 'an entrance to the most respectable families,' but asserted itself as one of the staple meat foods of the working classes. Its character as to quality, etc., has been assailed from prejudiced sources, but still it continues in popularity. Were consumers aware how palatable this article is, when warmed, the demand would vary less with the temperature of the weather, and cold cause less falling off.

"Chicago has maintained its supremacy as the seat of the trade, and several new brands of acknowledged equal quality to the older ones have appeared upon the market in what might be termed the 'orthodox' shape of can. This has astonished many, though we have never believed that a patent could be established on a shape of can.

"The determined efforts on the part of several leading Chicago packers to encourage æsthetic tastes amongst consumers by the free distribution of show cards and chromos, has done much to assist the introduction of their goods, as well as to work off 'some of their surplus profits,' as we recently saw it laconically put by a leading American paper. Canadian and South American efforts in compressed meats we have already touched upon, and we only note regarding Oregon and California, that the style of can has prevented attention being directed to them. One brand from an Oregon cannery, which has gone into liquidation, was of very superior meat, fairly well compressed, but the sealing of the cans being defective, caused a large percentage of swelled and bad. That of one California house (which has also failed) was, besides the drawback of being in round cans, of very inferior quality and carelessly put up. We have now to refer to Australian, put up by the Premier Company, and which has just been placed upon the market in moderate quantity. The quality of the meat is all that could be desired, and the great knowledge and skill of which it has had the advantage ensures that the preserve will be so too."

Int. 7. Have you examined an English patent issued to Ludwig
167 Granholm, August, 5, 1817, No. 4150; and, if so, will you state what you understand to be the process described therein, the same being for the preservation of animal and vegetable substances, and referred to in the answer of the respondents?

A. I have examined this patent recently. It describes processes by which, first, pieces of food to be preserved are packed in melted hot fat or strong hot animal fluid jelly and the vessel is completely filled therewith to displace the air. Secondly, the different pieces may be coated with melted suet before they are packed, and a solution of common salt may be used to displace the air. Thirdly, the vessel may

be completely filled with the article itself so as to expel the air, when the article is such as to permit it, as for example, butter. Now I quote:

(Objection made to the witness quoting from any patent.)

"If the article is meat, it is to be placed in the can in its own soup or fluid jelly, and the jelly should be so strong that it should be solid when cold." Extraneous jelly is used when necessary.

I do not find anything in this patent which conflicts with or anticipates the Marshall-Wilson patents. There is nothing contained in it that would instruct one to do what the Marshall-Wilson patents set forth. There is nothing about compressing the meat for the purpose of preserving it or for forming solid cakes corresponding to the form of the can, but as I have already stated, it is for preserving food and meat by covering over and sealing up each piece in a fluid which is intended to prevent the action of the atmosphere upon the pieces of food, excepting only when the article is such as butter, that may be run into the can in a liquid form when hot, expelling the air and solidifying therein. The mode of preserving meat is stated to be by placing it in a fluid animal jelly and then sealing it up, entirely unlike the Marshall-Wilson processes.

(Adjourned.)

168 BOSTON, *February* 1, 1879.

Int. 8. You have stated that there is no mention in the Durand patent of a compressed meat. I wish you would particularize what and all you find in this patent as to the condition in which the meat is placed in the can, and how you understand it.

A. I find that the patent is, among other things, for "preserving animal food," and the only mention of the manner in which the articles are put into the cans is as follows: "First, I *place* and *enclose* the said food or articles in bottles," etc. The italics are mine. There is no direction whatever about compressing meat, or the use of pressure in this patent.

Int. 9. Suppose you simply placed and enclosed meat in a can and submitted it to the bathing process, or placed it in a can with sufficient compression merely to fill the can, what would be its condition as to density or compactness after the bathing process when the can was opened? Would the contents be shrunken by the heat?

A. Yes, the contents would be shrunken by the heat. And if more than one piece of meat was in the can they would not be compacted together, they would not cohere, nor would the fibrous tissues be interlocked. The meat, if packed in this way, would not be in a solid cake nor compressed. This is illustrated by some of the exhibits in this case t t I shall refer to in my evidence presently.

observe further that this specification speaks particularly of the use of bottles or other vessels of glass, pottery, etc. The use of bottles would necessitate the putting in of the meat through the neck or narrowed part of the vessel, and the nature of the material (glass) is such as to prevent the employment of any considerable pressure, sufficient to effectually compress such an article as meat, without destroying the vessel. And there would be difficulty in getting this meat out of bottles.

Int. 10. Have you examined letters patent of the Kingdom of
169 Great Britain, No. 8776, of 1841, for preserving animal and vegetable substances, granted to Henry Gunter; and, if so, will you explain how you understand the process that is described therein? Please state fully.

A. I have examined this patent, and, in my judgment, it is substantially the old Appert process with this modification, that the patentee uses a hot sand-bath for heating. The specification states particularly that the "invention relates to a mode of treating animal and vegetable substances in cases or vessels by *heat*, and thus cooking, or partially cooking, the same, and *driving off* the atmospheric *air* contained therein, whereby the animal and vegetable substances so treated may be preserved for a length of time in a fresh and pure state, and retain their natural flavor." The italics are mine. This is the discovery or invention of Appert, and is only another practical application of his process. I understand that the food is preserved simply and entirely by the action of heat and driving out the air.

Int. 11. Will you state particularly the similarities and differences between the process described in this patent and the one described in the complainant's patent, No. 6370, granted to William J. Wilson?

A. Stated briefly, the differences are very nearly the same as those given by me when comparing the Durand-Appert processes with these of the Marshall and Wilson patents. In the latter a compressed cake of cooked meat is preserved. It is carried beyond its natural density or solidity by the pressure (used as a means of preservation by removing the principal agents of putrefaction), and in this way the vessel is filled entirely full of meat not disintegrated, nor desiccated, nor mixed with superfluous moisture. And this is in a vessel from which the meat may be readily removed in a moulded cake of attractive form, suitable for use on the table. When following the directions of the Gunter specification animal food or meat, if successfully preserved, would not be carried beyond its natural density or solidity, nor would it be
170 preserved by pressure, nor would the vessel be filled with meat, nor would it be in a solid cake, nor would it be in condition to issue in one moulded piece from the can, having the form of the can. There is nothing in this Gunter specification to instruct the operator to remove the bone and gristle or to press in the cooked, warm meat in a plastic, soft condition, so that the pieces would cohere and form a solid cake under pressure.

The only similarity that I notice is between the Marshall patent, wherein it states that "when the compressed meat is in its place the package or box is hermetically sealed, the air remaining in the same being expelled by the usual process in canning;" and this usual process of canning is that described in the Gunter-Durand and Appert patents.

Int. 12. Taking meat at 212° Fahrenheit, thoroughly cooked, hot, compressed into an hermetically-sealed vessel sufficiently to form a solid cake, and completely fill the interior of the vessel, which is afterwards hermetically closed, please state whether, in your judgment, the germs of fermentation would or not be destroyed if the compression and closing were done under the conditions named in the complainants' patent reissue No. 6370?

A. I think they would.

Int. 13. Will you state what degree of heat you find mentioned in the Durand and Gunter patents as requisite for the preservation of hermetically-sealed food?

A. In the Durand patent I find the temperature to be stated as follows: "I gradually heat to boiling." This would be 212°. In the Gunter patent I find that the temperature employed is stated as follows: "And cause the water therein to boil freely, but retaining it about two hundred and twelve degrees of Fahrenheit;" and again, "and heat being kept up to insure its being above two hundred and twelve

degrees of Fahrenheit, the air in the case or vessel will be driven out with the steam."

171 Int. 14. Please state whether or not it is an established fact in the science of the preservation of food that the point of ebullition both destroys the germs of fermentation in food and thoroughly cooks it.

(Objected to.)

A. It is.

Int. 15. Have you examined letters patent of the Kingdom of Great Britain issued to Jean Worthly, No. 375 of 1855, for an improvement in the preservation of meat; and if you have done so, please state your understanding of the process described therein.

(Objected to.)

A. I have examined this patent. It is partly for a process for curing meat in a mixture of sugar or salt, and then pressing the meat to remove blood and serous matter. The meat is then packed in layers in casks and melted fat is poured over them to fill the interstices.

It is evident that meat cured in this manner would not retain all its juices and nutritious qualities, nor is the meat preserved by a process resembling that of the Marshall-Wilson patents. On the contrary; it is sealed up in melted fat in casks.

Int. 16. Have you examined certain works referred to in the answer of the respondents in this case, to wit, "The American Family Encyclopedia of Useful Knowledge, or Book of 7,223 Receipts and Facts by T. Webster and Mrs. Parks, edited by D. M. Reese, and published in New York City by J. C. Doty in 1856, upon pages 784, 785, and 786 thereof; said book being described on the cover as Webster's American Encyclopedia;" also, the "New American Cyclopedia; a dictionary of useful knowledge, published in New York City by D. Appleton & Co. in the year 1861, in vol. 13, on page 589, under the title Preservation of Food;" also, in the ninth volume of "Encyclopedia Brittanica,"

172 on page 767, under the title "Food," published in 1855? And if you have done so, will you state what processes you found described in those publications?

(Objected to.)

A. I have been unable to find Webster's American Encyclopedia, but I have read the articles referred to in the other books. They give resumés of the processes of Appert-Durand and Gunter, with immaterial modifications, showing the state of the art at the time these books were published. I do not find in these books anything interfering with the Marshall and Wilson processes any more than the Appert process does.

Int. 17. Have you read the deposition put in by the respondents in this case of John Irvine, of New York City, foreman in the house of Kemp, Day & Co., and have you examined a specimen of the preserved meat put up by them? If so, will you describe the character of this article, the condition in which you found it, the process which you find described in his deposition, and annex hereto the can to be marked Complainants' Exhibit Irvine?

(Objected to.)

A. I have read a copy of the deposition, and have examined the contents of a can which I now produce.

(The witness produces a can marked "Complainants' Exhibit Irvine, W. P. Preble, jr., examiner.")

This can was handed to me by Mr. Clifford, of counsel for complainant, and it is marked: "I certify that this can of meat is of the same

kind as the one I put in as an exhibit in my deposition in the case Wilson Packing Co. and Libby, McNeill & Libby vs. W. B. Clapp.

"JOHN IRVINE."

It is a two-pound can, I believe. Upon opening, I found it to contain a sort of stew of pieces of meat two or three inches in general size. The can was not full. Its entire capacity was not occupied by
173 the meat. Nearly one-third was clear fat or tallow, on top; then came a stratum of meat in separate pieces, and the liquid watery juices not solidified or coagulated, and about half a teacupful were apparently at the bottom or flowing round the meat. The meat had not been compressed; it had not the form of the can, and it fell apart when the contents of the can were tipped out after the whole head of the can had been cut off. The fibers of individual pieces of the meat were not interlocked with other pieces. The fat is separated from the meat, or tried out, as it were, and not cooked into the interstices or pores of the meat itself. The superfluous moisture has not been removed, as this stew is largely composed of watery fluid. The juices are not distributed throughout the meat, but they are separated in the form of soup by itself away from the meat. The "integrity" of the meat, as I understand this term, is destroyed, and it does not resemble the meat preserved by the Marshall and Wilson patents.

In his deposition, John Irvine says, briefly, that they bone the meat and can it, pressing it in the cans by hand, so as to get the proper weight; that he never put up any compressed meats; that the meat is raw; that any pressure used is of the hand; and my examination of the product indicates that this statement is perfectly correct, but the process and product are certainly not the same as those described in the Marshall-Wilson patents. The process described in this deposition is substantially the old Appert process—perhaps improved by first removing the bone and objectionable parts from the meat.

Int. 18. Have you read the deposition of Henry Lee Borden, a witness of the respondents in this case; and if you have, will you describe the process which you understand him to explain in his statement, and while making your answer will you state what is "pemmican," which he mentions therein?

(Objected to.)

A. I have read his deposition, and I understand that he describes two processes—one for putting up pemmican in a solid
174 form, and the other for putting up raw beef not in a solid form. The latter process did not include compression of the meat, and is substantially the Appert process, which I have already described. The larger part of this deposition refers to meat put up by his other process, the product being what he calls pemmican, and in a solid condition. This was solid, cooked dried sausage-meat, pressed into the cans so hard that it had to be dug out. It is evident that it was not intended to have the meat come out in one solid cake, but it was necessary to dig it out for use. The meat was not in its natural condition. Its "integrity" was destroyed. It was dessic'ated, and it was wholly disintegrated by being ground up or pulverized in a machine finer than sausage-meat. That the meat was dessic'ated before it was packed is shown in the deposition, where Borden says that the juices of the meat did not flow out when it was passing through the sausage-machine. It is common knowledge that unless this pemmican had been very much dessic'ated in the pans when it was roasted in the oven, as Borden says, "until it was thoroughly done," in a rotary oven where the conditions are most favorable for thorough dessic'ation, the juices

would have been squeezed out in the pulverizing machine, such as is described in the deposition of John A. Wilson, as it has been repeated to me by Mr. Clifford, of counsel for complainants. That this meat was dried and dessic'ated is corroborated by Borden's answers to the eleventh direct and sixth and eighth cross-interrogatories, wherein he states that a six-horse-power machine was used for grinding the meat finer than sausage-meat, and it was pressed into the cans by a four-horse-power machine, and yet no juice exuded. There was not even superfluous moisture to be pressed out.

(Adjourned.)

175 BOSTON, *Feb.* 3, 1879.

Mr. Borden, in his answer to the fourth cross-interrogatory, also says that the meat lost some of its nutriment in the roasting or baking process.

Pemmican is cured, dried, pulverized, granulated, and seasoned meat, generally mixed with fat, and ground up with farinaceous material, like corn or biscuit, and so far as I know, it is always dug out of the package and eaten like devil'ed ham, by spreading it upon slices of bread, etc.

I find that substantially the same process described by Borden for preserving his pemmican has been published as a patent for more than twenty years. I refer now to the patent of M. Martin de Lignac, of Paris, France, dated April 7, 1855, numbered 12667. The specification of this patent describes a mode of preserving meat briefly as follows: The bones, sinews, and fat part of the meat being taken out, it is cut into pieces of two or three centimeters (from three-quarters of to a little more than one inch) in thickness, and it is placed in movable trays in an oven heated by hot air, at the temperature of 30° or 40° centigrade (86° to 104° Fah.). When, by evaporation, the meat has lost one-half of its weight, it is duly seasoned and put into tin cans and compressed with a hand-press. The can is hermetically sealed in the ordinary manner. This process consists in depriving alimentary substances of part of the liquid which they contain, and enclosing them cooked or partly raw and seasoned to the taste in tin cans.

The conditions under which the meat is prepared in this process are those most favorable to thoroughly drying or dessic'ating the flesh, and the temperature employed is almost exactly that in common use for effectually drying meat. Perfectly dried meat loses about two-thirds of its weight of moisture, and in this case it is directed that half the weight of the meat shall be driven off in the drying oven. Excepting that the meat is not pulverized or minced like Borden's, this

176 is substantially the process employed by him, and it differs essentially from the Marshall-Wilson processes, as I have already indicated.

Int. 19. Will you look at the opened can now shown you, to be marked Complainants' Exhibit Underwood's Meat, W. P. Preble, jr., examiner, and state how it was obtained by you, and if you made an examination of the contents, if you opened the can yourself, and what the consistency and condition of the contents were; and in your answer state the similarities and differences between the contents of this can and those of complainants' meat which you have examined?

(Complainants' counsel puts in evidence an opened can marked Complainants' Exhibit Underwood Meat, W. P. Preble, jr., examiner.)

A. This can of meat was given to Mr. Clifford, of counsel for complainant, in response to his request to Mr. Underwood for a can of the

same kind of meat as that put in by him as an exhibit accompanying his deposition in this case. I opened this can and examined the contents, with the following result: First, the can was not full; there was an empty space at the top, and the entire capacity of the can was not occupied. Secondly, the meat was not moulded into the form of the can. Thirdly, the meat was not in a solid cake, but dropped apart into several pieces when tipped out of the can. Fourthly, the fibres of the individual pieces of meat were not interlocked, and they did not cohere together; they had not been compressed. Fifthly, the different pieces of meat had only the natural density of cooked meat, no compression having been applied. Sixthly, it is perfectly manifest that the packing was not of that kind which designed that the meat should issue, when opened, in a solid cake. It is in no sense compressed, moulded meat. This meat differs from that obtained when following the directions of the Marshall and Wilson patents, in these six features at least.

177 Int. 20. At the date of March 31, 1874, what would have been understood, in the science of the preservation of food, by the term "hermetically-sealed packages," as set forth in the patent of the complainants, granted to William J. Wilson, reissue No. 6370?

Ans. At that time the term "hermetically-sealed packages" of food, meats, fruits, etc., meant tin cans, boxes, bottles, or other suitable vessels that had been "processed" or "bathed" and sealed up, so that the access of external air was excluded from the contents of the can after any air that might have been in it was driven out by heat in the bathing process. Hermetically-sealed packages of food, at that time, had invariably been closed in this manner, so far as I know. And the manner of processing and bathing were those fully described in the Appert, Durand, Gunter, and other patents. They include the action of heat upon the can and its contents to drive out any air that may be left in them, and thus aid in the preservation of the meat or other food, or if any air should be left, its conditions were believed to be changed so that it possessed no fermentative tendencies. I understand by this sentence, "cooked meat put up in solid form, in its natural state, without disintegration or dessic'ation, in hermetically-sealed packages," in the Wilson patent, that the invention includes the then well-known process of hermetically sealing the packages of compressed meat in the manner I have just described in this answer.

Int. 21. Will you now state, as a result of your examination of the complainants' patents and their product, and the specimens of Underwood and Kemp, Day & Co. meat, the differences which actually exist in the condition and consistency of the meat put up by the complainants and the other parties referred to? Please state fully.

A. I find that the meats of the Underwood and Kemp, Day & Co., as introduced by Irvine, belong to the same class. They have been put up by the Appert process. They are not compressed or packed in one solid cake. They are cooked meats of ordinary density;
178 Kemp, Day & Co.'s being a stew or demi-soup. Lee-Borden's pemmican and meat, if it was up under the De Lignac patent, must have been highly dessic'ated, and in the case of Kemp, Day & Co.'s meat, it must have been pulverized and disintegrated. This dried meat was driven into the cans by heavy pressure so that it could only be dug out for use, like devil'ed ham, sausage-meat or pemmican, which it is called, whereas, meat put up by following the directions of the Marshall and Wilson patent is not dessic'ated or disintegrated, but in its natural state. It has been compressed in the cans for

several purposes which I have named; to solidify it, to aid in its complete preservation, and to conform to the mould, which it does in the can, and which form it retains when taken out for use, as a solid cake ready to be cut into slices. It is not to be dug out like granular pemmican, nor do the pieces fall apart when the cans are opened and emptied, and it is not dried meat.

Int. 22. Will you examine the opened can now shown you, to be marked Complainants' Exhibit St. Louis Meat, W. P. Preble, jr., examiner, state how you obtained it, and if you opened it yourself, and describe the condition and consistency of the contents; and in this connection you may give the similarities and differences between the meat you found in this can and the kind of meat you understand to be described in the two patents of the complainants, one granted to William J. Wilson and the *and the* other to John A. Wilson?

(Complainant's counsel put in evidence an opened can marked "Complainants' Exhibit St. Louis Meat, W. P. Preble, jr., examiner.")

A. I purchased this can from one of the well-known dealers in hermetically-sealed packages of food in this city on the twenty-third day of last month. It is marked as being a two-pound package of "Cooked, Select Corned Beef, Solid, Compressed. Hermetically Sealed. St. Louis Beef Canning Comp. The meat is thoroughly cooked, is compressed, and comes from the can in a solid form." I opened this
179 can and examined the contents, with the following results: The meat in this can was not pemmican; it had been cooked, and was in a compressed form for transportation. The bone and gristle had been removed. The meat had been fragmentary, but it was not disintegrated, dessic'ated, pulverized, granulated, nor was its integrity or fibrous structure destroyed. The superfluous moisture and the air had been expelled from the meat and from the can. The natural juices were retained, and were distributed in a natural way. It had been compressed so that the fibres of the individual pieces were interlocked to such an extent that the meat forms one solid cake in the can, and had the form of the can or mould when it was taken out for use. This meat was in a can having the form of a truncated pyramid with flattened corners and four sides. Both ends of the body were made slightly flaring, so as to form interior shoulders or offsets, against which the heads rest. The edges of these heads are turned outward with air-tight joints. It had an aperture in the large head, which opening had been sealed by means of a cap or plate. In the plate there was a vent or opening to allow the air or gases to escape before sealing the can, and to prevent the meat from closing this vent, it was protected by means of a trough or gutter attached to the underside of the plate. This trough was open at both ends. This can was to be opened at the larger end, at or near the shoulder, by means of a can-opener, so that when the can was reversed again a slight tap on the smaller end caused the solidly packed meat to slide out in one piece, so as to be sliced as desired.

It was solid meat, compressed and secured within a pyramidal can, so that the can formed a mould for the meat and permitted its discharge as a solid cake. And it coincides in all respects with the descriptions of the Wilson patents, being precisely like the meat put up by the complainants, as I have examined it many times within the past three years.

180 Cross-examination by F. W. TOURTELOTTE:

X-int. 23. When was your attention called to an investigation

of the matters relating to the various patents referred to in your direct examination?

A. Some of these patents I first investigated a number of years since. My first interview with counsel in this case was last November.

X-int. 24. What patents did you investigate several years since?

A. The Durand, Gunter, and Appert patents.

X-int. 25. For what purpose did you investigate them?

A. With reference to a suit then pending in the circuit court of the United States.

X-int. 26. Who were the parties and the solicitors in the suit?

A. J. Winslow Jones was one of the parties. Mr. Clifford, counsel for complainants in this case, was one of the counsel.

X-int. 27. With reference to what principle did you investigate these patents?

A. With reference to the principle of which they treat, to wit, the preservation of articles of food.

X-int. 28. What kinds of articles of food?

A. Vegetable food especially, at that time.

X-int. 29. Have you made any investigation or examination of them since for any other purpose, until called upon to investigate the matter in this suit?

A. I have examined these patents repeatedly as the Winslow suits have come up in several different forms, and I have made myself familiar with them in connection with the application for patents by other preservers of food in hermetically-sealed packages. I cannot give exact times, but I have read these patents repeatedly during the past ten or twelve years.

181 X-int. 30. When did you first examine the patent called by you the Marshall patent?

A. Last November.

X-int. 31. Did you examine the Wilson patent at the same time?

A. I did.

X-int. 32. At whose instance and request was this examination made?

A. Mr. Clifford's.

X-int. 33. Are you familiar with the process described in the Marshall patent?

A. I think I am.

X-int. 34. Please state the elements of preservation of the food as described in the Marshal patent from recollection, if you can.

A. I have given them very fully in my answers to direct questions and without referring to the patent. As I recall them now, they consist principally in the compression of the meat after some previous treatment, with a second compression of the meat in cans, or other packages hermetically sealed, and processed or bathed in the usual manner of removing any air, or nearly all the air that may be remaining in the cans after the compression of the meat.

X-int. 35. Does the removing of the air by compression in the Marshall process have the effect to preserve the meat after the can has been sealed, after the removal of the air?

A. The removal of the air by any means has the effect to aid in the preservation of the meat.

X-int. 36. What other process is there necessary to complete its condition so that it will be preserved?

A. The complete removal of the air, or the changed condition of any small portion that may be remaining by heat, is essential to the preservation of the meat. I have no doubt this may be accom-

182 plished, more or less perfectly, by compression alone. Certainly it may be done by compression and the usual process of hermetically sealing.

X-int. 37. Do you know how much compression is used in the Marshall-Wilson process of canning meat?

A. Sufficient pressure to remove the superfluous moisture and air.

X-int. 38. Do you know that sufficient air is removed in the Marshall-Wilson process in any way to aid in the preservation of the meat?

A. I do; for two reasons. First, the appearance of the packages of meat preserved, when following the directions of these patents, shows this; and, secondly, because if air was present in anything but extremely minute quantity, it would admit of the decay of the meat. This has been shown by my experience with cans of such meat having minute holes in them, thus admitting a little air. By the appearance of the cans mentioned in the first part of this answer I mean their general concaved appearance.

X-int. 39. If the meat was put into the cans with such pressure as could only be exerted upon it by hand alone, would such pressure exclude to any considerable extent the air from the can, so as to prevent the meat from spoiling or becoming useless by putrefaction?

A. If the meat was warm when put into the cans, such pressure would be sufficient to drive out nearly all the air, and I have no doubt that meat so packed would be more or less perfectly preserved.

X-int. 40. Would the meat be preserved at all if it was not perfectly preserved so as to be of any mercantile value, or be in such condition as to prevent putrefaction or spoiling?

A. Yes; I think it would. This is illustrated in the putting up of preserves in the kitchen, when part of a lot of packages imperfectly put up are good and part of them bad.

183 X-int. 41. Would any of such articles imperfectly put up be good?

A. I mean by the word "imperfectly" that the processes employed are not complete, or there is want of care in the manipulation.

X-int. 42. In what does such want of care or manipulation consist, so referred to by you, and does it not refer to such an imperfect kind of putting up as admits the air?

A. Not necessarily; as, for instance, if the article to be preserved is put up too cold, or if it does not entirely fill the package in the first instance, the presence of air in the package and access of air to it are both elements that I have considered.

X-int. 43. Does it make any difference in putting up food of any kind in sealed packages whether the packages are filled full or not, as to its preservation, if the same is properly "processed," as it is termed, at the required degree of heat?

A. Not within certain limits. If the vacant space is very large in proportion to the article to be preserved, of course there would be a considerable proportion of air present as the vacuum obtained by processing is not absolute.

X-int. 44. If a can was filled the extent of seven-eighths of its capacity by food, and then properly processed, would it not be in a state of preservation as fully as if the can had been first filled?

A. I should not feel so certain about it as I would if the can was full, because there would be one-eighth of the volume of space of which a portion is air, and if the germs of fermentation and decay had not been entirely destroyed in the article of food, they, in connection with this small amount of air, might cause decay.

X-int. 45. What are the germs of fermentation?

A. I don't know. I don't think anybody does. The effect of
184 fermentation and decay is visible under the microscope. It is a question among scientific men just what the original germs, spores, or fermentative tendencies may be.

X-int. 46. Then I understand you to say that it is not known among scientific men what the germs of fermentation are or there is no well-defined opinion on the subject?

A. I do not know just what these germs are. There are opinions expressed by different scientific men that cannot be entirely reconciled. It is well known among scientific men that such bodies as bacteria are present in decaying animal or vegetable substances, and that they may be transferred from one piece to another, multiplying rapidly. But whether such bodies as these be the original germs of decay or whether they are alone the cause of decay, etc., are mooted questions.

X-int. 47. Do you or do you not know in what mode these bodies can be destroyed?

A. They can be destroyed by heat and by chemical agents; perhaps by other means.

X-int. 48. What chemical agents will destroy them?

A. Antiseptic agents and sulphurous acid gas, for instance.

X-int. 49. Does the presence of pure air, free from any germs of any kind, contain any property which would cause food to decay?

A. Abstractly, chemically pure air does not contain anything that is known to cause decay, but such air is not easily attainable, and the germs of fermentation are as likely to be in the article of food as in the air of the package in which it may be placed.

X-int. 50. To what degree must heat be carried to destroy such germs?

A. The exact degree is not known, but if all parts of the article to be preserved are submitted to a temperature of 212° thoroughly and perfectly, the germs of fermentation that may be present are destroyed thereby. But in practice the pieces of food are so large that they
185 are often heated above this temperature, in order to insure the complete penetration of the requisite degree of heat; 212° is sufficient if it be perfectly attained and applied.

X-int. 51. Then I understand you to say that if any quantity of food is placed in a can with any proportion of atmosphere or air, and the same is heated in all its parts to above a temperature of 212°, all the germs of fermentation are destroyed?

A. If this is perfectly done, all the germs of fermentation would be destroyed.

X-int. 52. Then, in the process of canning meat if, after the same is placed in a can, it is heated in all its parts to the extent of 212° it will insure perfect preservation whether the can be full or not of meat?

A. It will if the external air is excluded from the package.

X-int. 53. In what way, then, does the expulsion of a portion of the air of a can by pressure aid in the preservation of meat when if it is properly heated to the required extent it will be preserved without regard to the quantity of air, as the heating of the air destroys the germs, you say, if carried to a certain extent, and the same thing would be true of heating the meat?

A. In the preservation of meat there are several elements that must be considered. The presence of germs of decay in the meat and in the air that surrounds it, and the fact that they decay, does not take place excepting in the presence of some air, it being believed that the oxygen

of the air is the important element. Now, if a portion of the air is removed by pressure, we have removed so much of one dangerous element, and if the bathing should not be perfectly performed, so that all the germs of fermentation are not destroyed in the meat, then there is less danger of decay. The removal of air by any means from the interior of the can aids in the preservation of the meat, inasmuch as it is the removal of a dangerous element, and the compressed
186 form of the meat remaining prevents its ready reabsorption of air.

X-int. 54. In what way is any air dangerous to the preservation of meat when it has been rendered harmless by heat to such an extent as to destroy all the germs of decay?

A. If the air is rendered perfectly harmless and the meat is also freed from any germs of decay, there would not be any danger.

X-int. 55. Then does it make any difference whether the can is full or not, or whether pressure is applied to exclude the atmosphere?

A. Not theoretically, but practically the difficulty of obtaining these exact conditions renders the aid of compression and the fullness of the can important aids in preserving meat, because they insure the absence of one dangerous element, to wit, the air; and it is extremely difficult to obtain the desired temperature in the interior of a can of meat without injury to the outside parts. Therefore the compression becomes useful in driving out the air from the interior as well as from the external portions equally.

X-int. 56. Is it not absolutely necessary, in the Marshall-Wilson process, so to heat the can, after the meat has been put into it, as to destroy all the germs of putrefaction or decay, in order that the meat may be properly preserved?

A. This is an auxilliary means. I do not feel sure that it would be absolutely necessary. I think that as a fact the meat might be so completely and thoroughly pressed into the can, when warm from cooking, that it would be preserved or so nearly preserved as to change but slightly if in contact with any air not expressed from any particular part of the can. But in practice it is certainly best to employ heat in connection with compression for this purpose.

X-int. 57. Is it possible to compress meat into a can by hand,
187 through a small opening in the top, so solidly that it would exclude all the air from the can, taking into account the soldering on of the cover after the meat had been pressed into the can, to such an extent that all of the air would be excluded and all of the germs of fermentation or decay be driven out?

A. If the meat was hot I still think that as a fact so much of the air might be removed by pressure as to nearly preserve the meat. It must be borne in mind that the compression makes a solid cake of the meat, the air being driven out of the interstices by compression so that if a little air should be left in the can it would have been somewhat changed by the heat of the meat, and it would only support decay, if there was any, upon the outer surface of the cake of meat. There are illustrations of this sort of preservation of meat, such as we have now supposed, in sausages of cooked meat where the preservation is accomplished mainly by compression alone, although small quantities of air may be, and often are, left between the surrounding skins and the cakes of compressed, granulated meat.

X-int. 58. If decay had commenced on the outer surface of the cake of meat would it not surely extend to all parts of the meat unless arrested in some way?

A. Not unless there was sufficient air present to support the decay. This is illustrated in large cakes of cheese and such similar solid cakes of animal matter. A cheese very mouldy on the outside, for instance, may be entirely free from mould in the interior and remain so for many years, because the access of air to the interior is cut off, and, therefore, there being no air to support it, decay does not proceed through the whole mass.

X-int. 59. What causes the mould in the cheese, and does it contain any of the germs of fermentation or decay such as mentioned in your former answers?

A. The mould is caused by contact with the external air, which is believed to have the germs of fermentation and decay floating in it.

188 Mould is one kind of decay, and is believed to come from spores floating in the atmosphere and coming in contact with the outside of the cake of cheese.

X-int. 60. Do you mean to be understood as saying that mould is an incipient state of decay in cheese or any substance? But is it not rather an excrescence forming on the outside of a substance or the edges or particles of substances where there is sufficient space?

A. Mould is the product of one kind of decay, supported by the substance on which it is formed, just as gangrene is the product of another kind of decay of animal substance, also supported by the substance upon which it forms.

X-int. 61. Did you ever know of an instance where mould absolutely destroyed solid substances without any other agency than that of itself?

A. Mould hardly ever exists as one particular kind of fungus-growth. It is almost invariably accompanied by other kinds of decay, and is a most destructive element of organic substances, liquids, and vegetables especially, such as beers, wines, grains, corn, barley, etc. It is very difficult to determine what a solid substance is. If the pores of any substance are large enough to permit the penetration of mould, that substance is destroyed in flavor and composition, as a piece of bread, for instance, when mould gets into the interior.

X-int. 62. You stated, in substance, in regard to the process of putting up canned meat by the Durand patent, that the meat was put into the bottle in small pieces. Why do you conclude from the patent that such was the fact?

A. It is my opinion that if meat was preserved under the directions of the Durand patent, in bottles, it would have been cut small as compared with the size of the bottle itself, in order to permit its introduction through the necks of the bottles, because the bottles were to be stopped completely by means of corks, which would not permit of their having very large orifices and be completely closed.

189 X-int. 63. Do you find anything in the patent stating how large the bottles were or how large the orifice was?

A. Excepting that the orifices were to be closed with corks, plugs, covers of leather, cloth, parchment, bladder, etc., and the knowledge that it is almost impossible to make perfect closeness of large orifices with such materials, I find nothing else.

X-int. 64. Do you not know, as a matter of practical knowledge, that bottles are often constructed with an orifice as large as the opening in one of the cans of meat, and is it not a fact that in the market to-day many kinds of articles of food are put up in bottles with orifices as large as the orifice in the cans that Wilson makes through which the meat is placed in the cans?

A. Certainly.

X-int. 65. In what connection did you ever see the words "hermetically sealed" used in a patent for preserving food where the process of heating, etc., was not described?

A. The words hermetically sealed alone I may have seen in patents for other articles, but in patents for preserving articles of food I think the term hermetically-sealed packages means that they should be canned in the ordinary manner known and commonly practiced previous to 1874. I think the term hermetically-sealed packages used at that time has reference to the state of the art as it existed then, and I am confirmed in this by the fact that there were numerous dealers whose business was putting up and selling hermetically-sealed articles of food at that time (see business directories of cities) which had always been "bathed" if they were in cans or other suitable vessels. I think the term hermetically-sealed packages, when applied to articles of food, meant to persons familiar to the art the process of heating, etc., or bathing, in order to seal such packages hermetically.

X-int. 66. (Question repeated.)

Ans. I do not recall any such patent.

190 X-int. 67. Will you please attach to your deposition copies of the Durand, Gunter, De Lignac and Worthly patents and specifications, to which you have referred in your direct and cross examination, to be made parts thereof?

A. I will do so, with the exception of the Worthly patent, which I have not at hand, having examined it at the public library.

(It is agreed by counsel that the copies above referred to are to be certified by the examiner to be correct copies of those used by the witness in his deposition.)

S. DANA HAYES.

Attest:

W. P. PREBLE,
Examiner.

Copy De Lignac patent.

Patent 12667, for 15 years, dated April 7, 1855, to Mr. Martin De Lignac, Paris, France.

The bones, sinews and fat part of meat being taken out, it is cut into pieces of two or three centimetres in thickness, and it is placed on movable trays in an oven heated by hot air at the temperature of 30 or 40 degrees centigrade.

When by evaporation the meat has lost one-half of its weight, it is duly seasoned and put into tin cans and compressed with a hand-press, so that 1,000 grammes of meat baked as above are contained in a can of the capacity of one litre.

This done, the can is hermetically sealed and then submitted to further cooking in a closed water bath for a shorter or longer time, according to the size of the cans and the nature of the meats to be preserved. It would be easy to dry or bake the meat much more, but experience has demonstrated that this point of reduction gave the best results. I have taken it as the standard, without making it an absolute rule.

Applied to vegetables, to fish, to fruits, and generally to all watery alimentary substances, this process also gives good results.

191 To resume: This process consists in depriving alimentary substances of part of the liquid that they contain, and to enclose them cooked or partly raw and seasoned to the taste in tin cans, and to place those cans in a closed water bath. In case the baking has been carried too far, to re-establish the proper proportion a little water may be added in the cans before soldering them.

Copy of the Gunter patent.

A. D. 1841. No. 8776.

Preserving animal and vegetable substances.

To all to whom these presents shall come:

I, Henry Gunter, of Cullum street, Fenchurch street, in the city of London, merchant, send greeting:

Whereas Her present most excellent majesty Queen Victoria, by her letters patent under the great seal of Great Britain, bearing date at Westminster the sixth day of January, in the fourth year of her reign, did, for herself, her heirs and successors, give and grant unto me, the said Henry Gunter, her especial license, full power, sole privilege and authority, that I, the said Henry Gunter, my executors, administrators or assigns, and such others as I, the said Henry Gunter, my executors, administrators or assigns, should at any time agree with, and no others, from time to time, and at all times during the term of years therein expressed, should and lawfully might make, use, exercise and vend, within all Her said Majesty's colonies and plantations abroad, my invention of "improvements in preserving animal and vegetable substances;" in which said letters patent is contained a proviso, that I, the said Henry Gunter, shall cause a particular description of the nature of my said invention, and in what manner the same is to be performed, to be enrolled in Her said Majesty's high court of chancery, within six calendar months next and immediately after the date
192 of the said in part recited letters patent, as in and by the same, reference being thereunto had, will more fully and at large appear:

Now, know ye, that in compliance with the said proviso, I, the said Henry Gunter, do hereby declare that the nature of my invention, and the manner in which the same is to be performed, are fully described and ascertained in and by the following statement thereof (that is to say):

My invention relates to a mode of treating animal and vegetable substances in cases or vessels by heat, and thus cooking, or partially cooking, the same, and driving off the atmospheric air contained therein, whereby the animal and vegetable substances so treated may be preserved for a length of time in a fresh and pure state, and retain their natural flavor. And in order to give the best information in my power, I will proceed to describe the process as pursued by me. I employ (by preference) vessels or cases of tin, and of cylindrical or other convenient form, such vessels each having one end fixed therein, and into these vessels I place such animal substances as I may desire to preserve, having first scalded them; I then solder on the other end of each vessel, so that the vessel will be hermetically closed, having in filling allowed a small quantity of room in each vessel to permit the substance therein to swell. I then place a number of such vessels into a large boiler, and cover them with water, and close the boiler and cause the water therein to boil freely, but retaining it about two hundred

and twelve degrees of Fahrenheit, and continue such boiling for about two hours and a half for animal matter, and from fifteen to twenty-five minutes for vegetable matter. I then take out such vessels, and on examination, if they show no unsoundness, I place them in a hot sand bath or other convenient means of applying heat, so as to leave the upper end uncovered, and I puncture therein a minute hole, and heat being kept up to insure its being above two hundred and twelve degrees of Fahrenheit, the air in the case or vessel will be driven
193 out with the steam, and when it is seen that the steam is coming very freely, I close the minute hole by soldering iron whilst the steam is flowing off and in opposition thereto. The process will then be complete, and it may be remarked that by pursuing this process great advantages will be derived, as it will be evident that by causing the process of heat to be carried on during the time the vessel is hermetically closed, all the flavor of the substances treated will be retained, and the vessels will only be opened so long as simply to allow of the air being driven off, from which circumstance the animal and vegetable substances will be preserved in the most advantageous manner.

And in conclusion, I may remark that, although I have been thus particular in describing the exact means pursued by me, I do not confine myself thereto, so long as the mode herein described be retained, and I am aware that animal and vegetable matters may be preserved by simply placing them in such vessels as herein described, and closing them therein; but in place of having them hermetically sealed, when undergoing the process of heat to cook, or partially, cook the same, to have a minute hole or holes in the cover, and allow the vapors to flow off during the whole time of applying heat, and then closing such vessels when the substances are cooked to the extent desired; but I do not consider such process nearly so advantageous as that above described, as much of the flavor of the animal or vegetable substance or substances by the latter means would be driven off, whereas in the former processes the same are retained, as the cooking goes on during the time the vessel is hermetically sealed.

In witness whereof I, the said Henry Gunter, have hereunto set my hand and seal this thirteenth day of January, in the year of our Lord one thousand eight hundred and forty-one.

HENRY [L. S.] GUNTER.

194 *Copy of the Durand patent.*

A. D. 1810. No. 3372.

Preserving animal and vegetable food.

To all to whom these presents shall come:

I, Peter Durand, of Huxton Square, in the county of Middlesex, merchant, send greeting:

Whereas His most excellent Majesty King George the Third did, by his letters patent, under the great seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster the twenty-fifth day of August, in the fifte*enth* year of his reign, give and grant unto me, the said Peter Durand, my executors, administrators and assigns, his special license, full power, sole privilege and authority, that I, the said Peter Durand, my executors, administrators and assigns, during the term therein mentioned, should and lawfully might make, use,

exercise and vend within England, Wales, and the town of Berwick-upon-Tweed an invention communicated to him by a certain foreigner, residing abroad, of the method of "preserving animal food, vegetable food and other perishable articles a long time from perishing or becoming useless;" in which said letters patent there is contained a proviso, obliging me, the said Peter Durand, by an instrument in writing under my hand and seal, to cause a particular description of the nature of the said invention, and in what manner the same is to be performed, to be enrolled in His Majesty's high court of chancery within six calendar months after the date of the said recited letters patent, as in and by the same, relation being thereunto had, may more fully and at large appear:

Now know ye that, in compliance with the said proviso,

I, the said Peter Durand, do hereby declare that the nature of the said invention and the manner in which the same is to be performed are particularly described and ascertained as follows; that is to say:

195 First. I place and inclose the said food or articles in bottles or other vessels of glass, pottery, tin or other metals or fit material; and I do close the aperture of such containing vessels so as completely to cut off and exclude all communication with the external air; and as to the method of closing, I do avail myself of the usual means of corking, airing, luting or cementing; and in large vessels I make use of corks formed of pieces glued together in such a manner as that the pores of that substance shall be in a cross direction with regard to the aperture into which such corks are to be driven; and I do also, in such vessels as may admit of or require the same, make use of stoppers fitted or ground with emery, or screw caps, with or without a ring of leather or other soft substance between the faces of closure, and also of cocks or cross-plugs or covers of leather, cloth, parchment, bladder, and the like.

Secondly. When the vessels have been thus charged and well closed, I do place them in a boiler, each separately surrounded with straw, or wrapped in coarse cloth, or otherwise defended from striking against each other; and I fill the said boiler so as to cover the vessels with cold water which I gradually heat to boiling, and continue the ebullition for a certain time, which must depend upon the nature of the substances included in the vessels, and the size of the said vessels, and other obvious circumstances, which will be easily apprehended by the operator without further instructions. Vegetable substances are to be put into the vessel in the raw or crude state, and animal substances partly or half cooked, although these may also be put in raw. The food or other articles thus prepared may be kept for a very long time in a state fit for use, care being taken that the vessel shall not be opened until their said contents shall be wanted for consumption.

And, lastly, I do declare that although the application of the water bath, as hereinbefore described, may be the most commodious
195 and convenient, I do likewise avail myself of the application of heat by placing the said vessel in an oven or a stove or a steam bath, or any other fit situation for gradually and uniformly raising the temperature of the same, and suffering them to cool again; and, further, that I do, as the choice of the consumer or the nature of the said food or other articles may render preferable, leave the aperture of the vessel, or a small portion thereof, open until the effect of the heat shall have taken place, at which period I close the same.

In witness whereof I, the said Peter Durand, have hereunto set my

hand and seal the thirtieth day of August, in the year of our Lord one thousand eight hundred and ten.

PETER DURAND. [L. S.]

197 S. DANA HAYES, recalled:

Q. 1. Will you state what differences, to your mind, exist between the Marshall patent, referred to in the bill of complaint, and the process of preserving and packing cooked meats patented to William J. Wilson, also being one of the patents upon which this suit is founded?

A. I have already referred to some of these differences in my answer to the 5th and 6th direct interrogatories; and at your request I will set them forth rather more particularly. In the Marshall patent I find that the meat to be preserved is first subjected to a partial preserving process. I do not know exactly what this means, but suppose it may be partial preservation by pickling, salting, or the use of antiseptic agents, in the manner commonly practiced previous to the date of this patent. Then, before the meat is put into packages or boxes, it is subjected to a heavy preliminary pressure in such a manner that a large percentage of the water is expelled from it, and, of course, the pressing out of this water has a tendency to cause the expulsion and loss of some of the juices with the water then pressed out. This previously pressed meat is then forced into the package or box it is intended to fill, and then is hermetically sealed for preservation.

In the Wilson process patent I find that the meat is first cooked, so that all the bone and gristle can be removed, and the meat yet retain all its natural grain and integrity, so that it is in a proper condition for eating, wholesome and palatable—and by this I understand that the meat retains all its nutritive properties and juices. It is then (preferably while yet warm with cooking) pressed into boxes or cases, with sufficient force to remove the air and superfluous moisture only, and to form a solid cake for the purposes that I have already referred to. This specification is emphatic in the statement that the meat thus packed and compressed is in its natural state, not disintegrated nor desiccated, and it retains all the juices and nutritious qualities
198 of the meat, the compression in this case serving only to expel the superfluous moisture in one pressing, namely, that which it receives in the package.

In my judgment the most important distinctions between the Marshall process and the Wilson process are, first, in the former the meat is to be subjected to a preliminary heavy pressure, which, in removing a large percentage of the water, would necessarily remove some of the juices, unless the juices had been cooked and coagulated or jellified into the meat; whereas in the Wilson patent there is no preliminary pressure, and the cooked meat is only pressed in the packages to remove superfluous moisture; and this can be done with cooked meats without pressing out the previously cooked juices. The second difference is, that the Wilson patent particularly emphasizes the cooking of the meat; and I do not find any indication of this in the Marshall patent.

In the first part of this deposition I have several times used the expression Marshall-Wilson, for the reason that I intended to refer to the two processes together, and used this as a convenient term, not because the processes were the same but because I referred to them collectively. And in my answer to the 6th direct interrogatory, when referring to the great importance of the invention, considered practically, as shown by the quotation from the annual review of canned goods, &c., where I have used the expression Marshall-Wilson processes, I should have

been more accurate if I had said Wilson process; because the preserved meats now so valuable as articles food, that I had in mind, are cooked and compressed in the natural state, without desiccation, retaining all their juices and nutritious qualities.

Cross-examination by F. W. TOURTELOTTE:

X Q. 2. Is cooking meat one of the ordinary processes used for preservation of meat?

199 A. Yes and no. Ordinary cooked meat decays rapidly. Dried, smoked meats, which may be considered as one kind of cooking, are partially preserved against rapid decay.

X Q. 3. Does not the cooking of meats by heat serve for some considerable time to keep them from putrefaction or decay?

A. I cannot answer directly, because I am not sure what might be understood by the term considerable length of time. Cooked meats do not decay so rapidly as raw meats.

X Q. 4. Is or is not cooking of meats, used in the ordinary acceptation of the term, by heat, one of the ordinary processes to preserve meat against or from putrefaction?

A. It is one part of such process. It helps to preserve.

X Q. 5. What office does the salting of meat perform, and for what purpose is it used?

A. It helps to preserve meat better than cooking.

X Q. 6. Are not salting and cooking meat both processes for its preservation, and are they not ordinary processes?

A. Salting meat is an ordinary process for preserving it. Cooking, alone, without hermetically sealing, is not a common process for preserving it as an article of preserved food known in commerce, excepting the drying and smoking that I have referred to.

X Q. 7. Do you not know that it is a common, ordinary practice, and in common use, to cook meat in the warm seasons of the year, in order to preserve it for a greater length of time than if it remained in a fresh state?

A. Certainly.

X Q. 8. Then, could you not say that cooking was an ordinary process of preserving meat?

A. Not any more directly than I have already said so, because it only preserves the meat a little longer than if it was not cooked. Cooked meat decays, but not so rapidly as fresh meat.

260 X Q. 9. What are the natural values of meat?

A. Its nutritious properties; the absence of anything like the products of decay, that are more or less poisonous; and, if it be cooked meat, its physical condition insuring comparatively easy digestion in the stomach.

X Q. 10. Do you say that the natural values of meat are poisonous?

A. No; the natural value of meat depends partly upon the absence of anything poisonous.

X Q. 11. What is there poisonous in the natural value of meat?

A. Nothing, unless decay has set in.

X Q. 12. Then, if decay has set in you have introduced a foreign element into the meat, haven't you, that is not contained in its natural state?

A. Certainly.

X Q. 13. Then your meat would not be in a natural state, would it, if any foreign element is introduced?

A. No.

X Q. 14. Are the juices of the meat the valuable portion, or a part of the valuable portion, of meat?

A. They are.

X Q. 15. If meat is cooked in water to the extent usually employed in cooking it for food, and any of the water mingled with the meat is excluded or pressed out of the meat, does such water necessarily contain some of the juices of the meat?

A. Almost always.

X Q. 16. What extent of pressure is necessary upon meat cooked in water to exclude the moisture?

A. The moisture begins to come out upon very slight pressure, and is entirely removed only by very heavy pressure, depending upon the size of the pieces and the completeness of the cooking.

X Q. 17. If meat is cooked in a vessel in a loose state, in
201 water, to the extent ordinarily done for food, what proportion of its bulk must it be compressed in order to exclude the water in the meat by pressure?

A. The water clinging to the meat and in the interstices is very easily removed; and probably if the meat was pressed to one-half its original volume, would be nearly all removed. But there is always some moisture remaining in the dryest of meat used for food.

X Q. 18. Would it take as much pressure upon meat cooked and placed in a can, with one end partially open to remove the superfluous moisture, as it would if both ends were open, or the whole of the top or side or bottom or one end were open?

A. If I understand the question rightly, the same amount of pressure would be necessary under any of those conditions. But perhaps I may be permitted to say here that an essential feature would be a package capable of holding the juices thus pressed out around the meat in the package, so that they are not lost; and if both ends were open, the juices would be lost.

X Q. 19. You were not asked whether the juices would be lost or not, but to state whether more or less pressure would have to be used in order to exclude them. Now, state if more or less pressure would have to be used in pressing out the superfluous moisture from a can like Libby, McNeill & Libby's cans, of four pounds of meat, where the pressure is entirely introduced through a round hole at one end, than when one whole side of the can was open upon which the pressure was employed to exclude the superfluous moisture.

A. Pardon my stupidity; but I believe your former question refers to pressing the moisture out of the meat, while this one speaks of pressing it out of the can. To press it out of the meat would, in my judgment, require about the same pressure under almost any conditions; but in pressing it out of a can it would come easier from the largest opening.

202 X Q. 20. Do I understand that it would require as much pressure to exclude moisture from meat where the meat is not confined or enclosed as it would where it is nearly confined or enclosed in the can or package?

A. To exclude the moisture from the meat itself, requires the same amount of pressure under any circumstances. If it is in a can, and pressed through a small opening, I think the moisture would exude from the meat itself with the same ease or amount of pressure that would be necessary to use through a larger opening, because the walls of the can, in either case, exert what I may be permitted to call a backward pressure, corresponding in force to the direct pressure employed.

X Q. 21. How do you understand the meat to be prepared for canning under the Marshall patent, taking into account the fact that it is previously subjected to pressure and pressed into a can, as to whether it is boneless or contains the bone and the gristle?

A. I do not find anything about bone and gristle in the Marshall patent.

X Q. 22. From the fact that it speaks of pressing the meat after being prepared, and also pressing it into cans, is it not a fair inference *for* the language used in the patent that the same is boneless and free from gristle or hard substance?

A. Of course, the large bones of beef could not be pressed into small cans. The patent speaks of packages or boxes, and the sizes are not given.

X Q. 23. Is not a tin can a package?

A. Certainly.

X Q. 24. Would not the presence of bone or gristle in cooked meat impede in some degree the exclusion of moisture by pressure?

A. Certainly.

X Q. 25. What do you understand by the term "heavy" pressure in Marshall's patent?

203 Heavier than the means commonly employed for pressing cold meats in the kitchen.

X Q. 26. Do you know the extent of pressure for pressing cold meats in the kitchen?

A. I have seen it done in several kitchens.

X Q. 27. Do you understand by the term heavy pressure, in Marshall's patent, any definite quantity of force applied, or is the term not relative in its nature as applied to the pressure of meat; and would it not be varied in accordance with the article upon which such pressure is applied?

A. I believe it to be a relative term, as applied to the pressure of meats, and that it is sufficient to accomplish the desired result.

X Q. 28. I understand you to say, in your examination to-day, that the juices of the meat are often cooked into the meat by the usual ordinary process of cooking; if so, would the juices be excluded by pressure being placed upon the meat sufficient to exclude the superfluous moisture or water in the meat?

A. Not necessarily. This depends upon the completeness and mode of cooking.

X Q. 29. If it is cooked to the usual condition when used for eatable food, when boiled in water or cooked in steam; would such be the case?

A. Thoroughly cooked meat, especially if previously salted, would not lose its juices; but if the meat is insufficiently cooked, in plain water, it would lose some of its juices.

X Q. 30. Do you find anything in the Marshall patent to indicate that the pressure employed removes anything more than the superfluous moisture and water of the meat, which is destructive of the meat?

A. Yes. I find in the specification describing the process, on the 37th page of the record, that the water of the meat is rendered temporarily proof against putrifaction by any of the ordinary processes,
204 by which a large percentage of it is removed, the remainder being charged with concentrated antiseptics. By this I understand that the meat is preserved, or partially preserved, by the use of antiseptic agents, and not by cooking. After this preservation with

antiseptic agents, it is submitted to the first or preliminary heavy pressure. Now, meat partially preserved in this way must necessarily lose some of its juices by exudation, when submitteed to pressure, as they are not fastened or coagulated in the meat. In this state it is afterwards pressed in the packages and hermetically sealed.

X Q. 31. What are antiseptics, using the term in reference to the preservation of meats?

A. There are a great variety of them, salt and saltpetre being the ones principally used.

X Q. 32. What is the effect of the use of antiseptics on meat?

A. They prevent decay.

X Q. 33. Would any process that prevents decay be called an antiseptic?

A. No.

X Q. 34. Give an example of those that would not.

A. Exclusion of air, as in hermetically sealing.

X Q. 35. Would boiling meat to the extent usually done for food be considered an antiseptic?

A. No.

X Q. 36. Why not?

A. Antiseptics are chemical agents, such as salts, acids, etc., that must be applied to the meat and brought in contact with it in a liquid solution or in solid form to preserve it by preventing putrefaction. Water is not an antiseptic agent, and heat is not known as an antiseptic agent.

X Q. 37. Does the use of force applied twice to meat put into a can necessarily exclude more of the superfluous moisture than the same pressure applied once?

A. Not if it is all done in one and the same package.

205 X Q. 38. If meat was simply pressed into the form of a can and then only sufficient pressure used to press it into the can, would any more superfluous moisture be excluded by such two pressures than by one of the same degree as pressed it into the form?

A. No, I think not; I understand you to be speaking of superfluous moisture simply.

X Q. 39. What do you understand by the term superfluous moisture in connection with the subject of the patents about which you have been questioned?

A. I understand superfluous moisture to mean water only in contradistinction to the pieces of the meat.

X Q. 40. Can you, when water has been boiled into all the parts of the meat, exclude any considerable portion of it without excluding some of the juices of the meat with it?

A. Not unless the juices have been cooked into the meat.

X Q. 41. Is it possible for the juices to be cooked into the meat so that they are not excluded with the water of the meat when the same are cooked or boiled in water to the extent usually done for food, or by steam with sufficient heat to cook the meat to that extent; when pressure is applied after such cooking with sufficient force to exclude the fluid from the meat?

A. Yes, it is possible to do this; it is commonly done.

X Q. 42. How can the juices of the meat be fixed in the meat so as to prevent their mingling with the water when applied to and boiled with the meat, when the water is excluded by pressure?

A. By coagulation, as is illustrated in the difference between boiling fresh beef and corned beef.

X Q. 43. What is the consistency of the juices when coagulated by such process; are they in a solid or semi-solid form?

A. They vary with the different parts of each piece of meat containing them. Near the surface of the meat they are more solid than in the interior.

206 X Q. 44. What would be the condition of such juices when so coagulated in cooked corn beef, in pieces such as would naturally be used for salting purposes, as to their consistency, as to being hard or soft?

A. They would be in the form of jelly, more or less hard.

X Q. 45. Would they be impervious to water when boiled with water to an extent sufficient to cook the meat for food?

A. Practically so, when there is sufficient pickle or salt, etc., in the corned meat.

X Q. 46. Would it require a large quantity of salt in the pickle to produce such a condition?

A. No; only so much as the meat would naturally take up in the ordinary process of pickling.

X Q. 47. Then I understand you to say the meat, after having been salted as we understand the term "salted meat," would lose none of its juices by being boiled in water to an extent sufficient for food, and that none of the juices of the meat would mingle with the water?

A. Not exactly; I have mentioned, as an illustration, the notable difference between boiling fresh beef as in making soup, and boiling corned beef where it is desired to retain the juices more or less perfectly in the meat, having in mind the common cooking in the kitchen. It is possible to preserve the juices of meat by cooking under proper conditions, but I do not mean to say that common salted meat would lose none of its juices when boiled in water, only that salted meat gives up much less than fresh meat under just the same conditions.

X Q. 48. If, then, it be true that the salting of meat fixes the natural juices to such an extent that they are nearly impervious to water, and will not mingle with water when boiled in water, how is it possible that the natural juices of the meat are excluded from the meat by pressure?

A. Because the juices are not fixed in the meat by the salt until heat is applied.

207 X Q. 49. Then when heat is applied to salted meat the juices will not be excluded by pressure. Is this so?

A. Not exactly; when the juices are coagulated in the meat by salt and heat for instance, the superfluous moisture may be removed by comparatively light pressure without any considerable portion of the real juices. But the juices may be forced out by heavier pressure in the form of jelly if it is desirable.

X Q. 50. Do you pretend to say that the juices in the meat, when in the condition of the consistency of jelly, would not mingle with boiling water when mingled with it in boiling, so that the water would not be impregnated with it?

A. Those juices are only coagulated and fastened in the meat by salt and heat together. Those coagulated juices which are not removed by boiling water containing salt may be forced out of the meat by heavy pressure after the boiling.

X Q. 51. What degree of heat in boiling must be arrived at before the natural juices of the meat are coagulated?

A. Not more than 212°, probably less.

X Q. 51. If at a less degree than 212° would not any greater heat cause the juices to mingle with the water?

A. No; it would only serve to coagulate them harder.

X Q. 52. Then it is not possible so to boil salt meat in water that the water will be impregnated with the juices of the meat?

A. I have not said so.

[SEAL.] S. DANA HAYES.

Attest: W. P. PREBLE, Jr., *Examiner.*

Complainants here introduce letters patent of the United States, No. 43516, dated July 12, 1864, granted to William C. Marshall, the same being the original of reissue 6451, division A, in suit in this case. The same to be marked "Exhibit Marshall Original."

[SEAL.] W. P. PREBLE, Jr., *Examiner.*

Attest: W. P. PREBLE, Jr., *Examiner.*

208 *Exhibit Marshall Original patent.*

To all whom it may concern:

Be it known that I, W. C. Marshall, of the city, county, and State of New York, have invented a new and improved process of preserving meats, and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same; reference being had to the accompanying drawing, forming part of this specification, in which

Fig. 1 represents a longitudinal vertical section of the apparatus which I use in carrying out my invention; the place of section being indicated by the line *xx*, Fig. 2.

Fig. 2 is a horizontal section of the same, taken in the plane indicated by the line *yy*, Fig. 1.

Similar letters of reference indicate like parts.

This invention consists in exposing the meat to be preserved, before it is put up in packages, to a heavy pressure in such a manner that nearly all the water, not chemically combined with the meat, and a large quantity of air contained between the various pieces and in the pores of the same, is expelled before the meat is put up in the packages, and by these means the principal agents of putrefaction are removed, and its bulk is considerably reduced; it consists further in a press-box provided with a hinged end and movable screw-top, in combination with a follower and also with a frame, fitting to the end of said press-box, and capable to receive and hold the mouth of the package to be filled with meat in such a manner that by removing the top of the press-box the meat can be easily introduced, and by closing down said top it (the meat) can be readily compressed to agree with the size of the package and, after it has been compressed by opening the movable end of the press-box and putting the package in its place, the compressed meat can be easily forced into the package without exposing the package to any undue strain or pressure.

209 The ordinary method of preserving meats for commercial purposes is substantially as follows:

The meat being first subjected to the action of salt and saltpetre in the form of brine until the water of the meat is saturated, is then removed from the brine and placed in packages of wood with an entirely new solution of salt and saltpetre. This process is known to be destructive of all, or nearly all, the nutritious values of the meat in a very short space of time.

My process is executed as follows: After rendering the water of the meat temporarily proof against putrefaction by any of the ordinary processes, said water being the only destroying agent (I remove a large percentage of it), the remainder being fixed by the concentrated antiseptics, I then subject a given quantity of the meat to pressure in a box cylinder until all air is driven out and the space occupied by the meat agrees with the size of the package it is intended to fill. When the meat is in its place the box is hermetically sealed, and in this state retaining all its nutritive qualities; the meat will remain perfect as long as the package remains intact.

The advantages of this process are, first, that the natural values of the meat are not destroyed by the means of protecting it from putrefaction, as is unavoidable in the ordinary processes; second, that only about one-half the space and weight ordinarily required is necessary, by this mode, for the same quantity of meat.

The apparatus which I use to carry out my process consists of a strong frame A, made of wood or any other suitable material, and provided with a table B, which supports the press-box C. The top, D, of this box is suspended from a screw E, which is tapped into a nut E, resting on wheels, or otherwise arranged, in such a manner that the top can be easily removed from over the box, and after the meat has been introduced, readily replaced and brought down firmly by means of the screw.

F is the follower, which is attached to the screw G, provided
210 with a hand-wheel H, or otherwise arranged, so that said follower can be readily moved in and out, and a powerful pressure can be exerted by the same.

The end, I, of the press-box, which is opposite the follower, is hinged so that it can be easily opened, and when it is closed down, and the box rigged up for compressing a quantity of meat, said hinged end is held in position by a brace, J, which is hinged to one of the uprights of the frame A.

After the meat has been compressed to the desired degree, the hinged end, I, is thrown open, and the package, K, intended to receive the meat, is put in position. The mouth of this package is held in a metallic frame, L, the interior of which corresponds in size and shape exactly with the press-box, and which is provided with a shoulder, *a*, to the thickness of the sides of the package. A suitable wedge, M, or other device, retains the package and frame in position, and by moving the follower in the proper direction the compressed meat is pushed into the package. The meat being non-elastic, readily retains its bulk, and the sides of the package are not exposed to any undue strain. After the package has been filled, it is removed from the press and immediately sealed up hermetically, and the meat thus prepared can be preserved for a long time, provided the package remains closed.

Having thus described my invention, I claim as new, and desire to secure by letters patent—

1st. Exposing the meat to be preserved, previous to putting it up in packages, to a heavy pressure, substantially as and for the purpose herein specified.

2nd. The press-box C, with its movable screw-top D, follower G, and hinged end I, constructed and operating substantially as and for the purpose herein shown and described.

3rd. The frame L, applied in combination with the package K and

press-box C, in the manner and for the purpose substantially as herein set forth.

(S'g'd.) W. C. MARSHALL.

Witnesses:
J. P. HALL.
M. M. LIVINGSTON.

211 *Amendments to answer.*

Patent issued to John Wortheimer, dated September 8th, 1841, numbered 8874, and was for preserving animal and vegetable substances and liquids.

Patent issued to Jules Jean Baptiste Sylvian Martin de Lignac, dated October 14th, 1855, and was for an improved mode of preserving animal substances.

William Underwood & Son, in the city of Boston, in the state of Massachusetts.

Gail Boiden Meat Preserving Company, in the town or city of Borden, in the State of Texas.

William Archdeacon, in the city of Chicago, Cook County, Illinois, and in the town of Crystal Lake, McHenry County, Illinois.

212 DEFENDANT'S DEPOSITIONS.

THE WILSON PACKING COMPANY ET AL., COMplainants,
vs.
WILLIAM B. CLAPP, DEFENDANT.

Deposition of witnesses taken this 20th day of September, A. D. 1878, before me, John G. Reid, notary public and special examiner, under the 67th rule as amended, for and in behalf of the defendant, by the consent of the counsel on both sides present, Mr Tourtellotte for the defendant, and Mr. Clifford, Munday, Jewett, and Goodwin for complainants, in the case of The Wilson Packing Company et al. against William B. Clapp, now pending in the circuit court of the United States for the northern district of Illinois, in chancery.

It is stipulated and agreed that previous to the instigation of this suit, Arthur A. Libby, one of the complainants named herein, by deed of assignment, duly executed and recorded, became owner of letters patent of the United States granted to W. E. Marshall, of the city, county, and State of New York, on a process for preserving meats, said patent being dated July 12th, 1864, No. 43516, and after-
213 wards reissued to said Libby under date May 25, 1875, No. reissue 6451, being the same upon which a part of the bill in this case is founded; the right of the State of New York under said patent being reserved to said Marshall.

Deposition of John C. Merry.

JOHN C. MERRY, a witness of lawful age, being duly sworn, deposeth as follows:

Mr. TOURTELLOTTE. What is your name, age, place of residence, and occupation?

Ans. John C. Merry; age, 53 years; reside at Chicago, Cook County, Illinois; and occupation canning meats, vegetables, and fruits.

2. Int. How long have you been engaged in the business of canning meats and vegetables?

Ans. I commenced in 1851 or 1852.

3. Int. Where did you commence such business?

Ans. In Portland, Maine.

4. Int. How long did you continue such business in Portland, Maine?

Ans. About sixteen years.

5. Int. Where had you been engaged in business prior to your going to Portland, Maine?

Ans. At Eastport, Maine.

6. Int. In what business were you engaged at Eastport, Maine?

Ans. Putting up fish, all kinds of fish.

7. Int. With what firm were you connected while you were engaged in business, as you say, at Portland, Maine?

Ans. Rumery & Burnham.

8. Int. Were you engaged with such firm during all the while you remained at Portland?

Ans. I was.

9. Int. In what business was the firm of Rumery & Burnham engaged during the time you was connected with them?

Ans. In putting up meats and fish.

(it is here agreed that when objections are made during the rest of the testimony in this case, either to interrogatory or answer, that
214 the cause of such objections need not be spread upon the record, except when the objection is to form.)

10. Int. In what capacity were you connected with said firm?

Ans. I acted as processing the goods—I mean after they were canned.

11. Int. What kind of meats were put up by said firm while you were with them?

Ans. Beef, mutton, and veal principally.

12. Int. How large an establishment was that of said firm while you was engaged with them, and how many people did they employ?

Ans. During the war, when they had contract with government, I guess they had about a hundred hands—I should judge so.

13. Int. Was the beef put up by said firm put up in a raw or cooked state?

(Objected to by Mr. Clifford.)

Ans. Both ways—raw and cooked both—not for the government though.

14. Int. Was the meat so put up enclosed in cans hermetically sealed?

(Objected to in form and substance.)

Ans. Yes, sir.

15. Int. What kinds of meat were so put up besides beef, if any?

(Objected to in form and substance.)

Ans. Mutton, veal.

16. Int. Give the process in putting up cooked meats in cans in detail.

(Objected to.)

Ans. Roast beef was put up in what we call open-top cans, and sealed up. It had to be pressed in somewhat to get the weight in the cans; then it was sealed up and processed.

17. Int. How was it pressed into the can?

Ans. It was pressed in with a kind of a lever, a lever fastened at one end with a plunger attached; the can was shoved under the plunger and the lever brought down.

18. Int. State whether or not the can was filled full of meat.
(Objected to.)
Ans. It was filled as full as it could be soldered up.
19. Int. In what condition was the meat when taken from the can after having been put up as you have stated?
(Objected to.)
215 Ans. If the can was opened properly it would come out solid—whole.
20. Int. After the meat had been placed in the cans as you have already stated, and the top or cover *or cover* had been sealed or *or* soldered on, was there anything further done with the can before it was ready for the market?
(Objected to.)
Ans. It had to be processed.
21. Int. What do you mean by the term "processed"?
(Objected to.)
Ans. The can was put into water, hot water, and left there a certain length of time; then it was taken out, or vented as we term it, to let the air escape that was in it; then it was put back into hot water again and left there some time; then it was taken out and cooled, cleansed, and lab'led, and then it was ready for shipment.
22. Int. What was the condition of the meat when it was put in the can?
(Objected to.)
Ans. Roast beef was as hot as we could handle it.
23. Int. What was its condition as to its solidity, as being connected with the bone or being free from it?
(Objected to.)
Ans. Free from the bone; there was no bone in it.
24. Int. What was the condition of the meat as to moisture when put up in the can?
(Objected to.)
Ans. It retained all its juices.
25. Int. Was there any moisture put up with the meat except its natural juices?
(Objected to.)
Ans. Not any.
26. Int. During what years was meat put up in Portland in the manner heretofore stated by you?
(Objected to.)
Ans. 1851 or 1852; that was what they were doing when I first went with them in one of those years.
27. Int. How long did they continue putting up meat in that way?
(Objected to.)
Ans. They were all winter the first year I went with them; a little along every winter; they only worked at it in the winter. I don't remember how many years.
28. Int. Please state if you know of any firm besides that of Rumery & Burnham putting up meats in this manner which you have
216 described, from 1854 or several years thereafter.
(Objected to.)
Ans. Yes; I do.
29. Int. Please state the names of those firms and where located.
(Objected to.)
Ans. W. K. Lewis & Bros., Portland, Maine, on custom-house wharf. I don't know of any one else at Portland then.

30. Int. State whether or not the meat put up as you have described was a common article of merchandise throughout the country during these years.

(Objected to.)

Ans. Yes, sir; it was.

31. Int. Are you acquainted with the cooked canned meats put up by the complainants in this action?

(Objected to.)

Ans. Yes, sir.

32. Int. Have you ever examined them and noted their character after they were put up?

(Objected to.)

Ans. Yes, sir; I have.

33. Int. Please state whether the canned meats put up in Portland, Maine, by the several firms mentioned had the same general appearance in the cans as those put up by complainants.

(Objected to.)

Ans. No, sir; they had not.

34. Int. In what respect did they differ?

(Objected to.)

Ans. One is corned beef and the other was roast beef; the corned beef costs more, solid, and looks red; the roast beef is dark and does not slice like corned beef; the roast beef was not so salt—more fresh.

35. Int. What was the state of the roast beef when put in cans as stated by you?

(Objected to.)

Ans. It was put in in as large pieces as we could get it in.

36. Int. What have you been engaged in doing since you have been in this State?

(Objected to.)

Ans. I was with Mr. Archdeacon nearly three years, canning fruits and vegetables. I put up meats for D. H. Tolman & Co. and the Chicago Packing & Provision Company. I put up fruits and vegetables for the Elgin Packing Company.

37. Int. Do you know the kind of meats put up by the Chicago Packing & Provision Company, and the mode of putting them up?

(Objected to.)

217 Ans. Yes, sir; I do.

38. Int. State how long you were engaged with the Chicago Packing & Provision Company in putting up meats.

(Objected to.)

Ans. I went there when they first opened, and remained with them four or five months.

39. Int. State whether the meats put up by the Chicago Packing & Provision Company were put up in the same manner as those put up by the complainants.

(Objected to.)

Ans. They looked about the same. I can't tell whether they were processed the same or not.

Cross-examination, de bene esse, by Mr. CLIFFORD, the right being reserved under all the objections made:

40. X-int. Where was the factory situated in Portland, belonging to Rumery & Burnham, in which you say you worked?

Ans. On Burnham's wharf.

41. X-int. Who, if any one, was at work with you in the bath-room?

Ans. Morrell and Burnham.

42. X-int. George Burnham and Charles Morrell?

Ans. Yes, sir.

43. X-int. What was applied to the beef while it was being roasted, preparatory to its being put into the cans? Was it or not roasted in the ordinary way?

Ans. It was roasted in the ordinary way in an oven.

44. X-int. Was the beef introduced into the cans before the can-cover was put on?

Ans. Yes, sir.

45. X-int. Was the cover then applied and soldered on?

Ans. It was pressed down first and then the cover applied.

46. X-int. The cans in which this beef was packed were fitted with whole covers, were they not.

Ans. They were.

47. X-int. So that the lever of which you speak was applied while the whole top of the can was open, was it not?

Ans. Yes, sir.

218 48. X-int. By what means was the cover held in place while it was being soldered on?

Ans. It was driven down till it brought up to a shoulder on the can; it held itself there then by being driven down solid.

49. X-int. After the pieces of bone were taken from the meat, if there were any, the meat was placed in the cans, was it not, in instances where it had been first cooked?

Ans. Yes, sir.

50. X-int. Were or not this firm putting in green corn in its season when you were there?

Ans. Yes, sir.

51. X-int. Did they or not use a press to compact the corn in the cans through the stud-hole of the can?

Ans. They did.

52. X-int. This corn was packed, was it not, with more or less of juice surrounding the kernels?

Ans. Yes.

53. X-int. Was or not this press of which you have spoken the same or similar to the one used in preparing the corn, with the exception of the funnel?

Ans. Yes; it was similar to it—there wasn't so much of it.

54. X-int. Now do you state that there was any other object in view in compacting the roast beef into the cans than to fill the can and make the weight?

Ans. That was all, sir; to make the weight.

55. X-int. And the same object was aimed at, was it not, in the forcing in of the corn?

Ans. Yes, sir.

56. X-int. Then the object of the mode of packing pursued by the Burnham firm was simply so to introduce the meat into the can as to make full weight, was it not?

(Objected to.)

Ans. Yes, sir, simply, as far as I know.

57. X-int. You are not aware of any other object aside from the preservation of the contents of the can to which this process aimed?

Ans. No, sir.

219 58. X-int. You do not swear, do you, that the meat put up by

Rumery & Burnham referred to, when freed from the can, would preserve the shape of the can interior?

Ans. It would not come out in its whole form always; it would sometimes when it was cool—not like the corned beef of the complainants.

59. X-int. Mr. Merry, was there any difference, so far as the mere packing of the goods into the cans are concerned in this factory, between the modes employed for beef, fowl, soups, and other things?

(Objected to.)

Ans. None; all done about alike.

60. X-int. Now, when you removed canned roast chicken, turkey, or fish from the cans, is it not true that the contents would run out and spread out in the dish into which they were poured, as a general thing?

Ans. Yes, sir; more in warm weather than in cold.

61. X-int. The fact that they spread out less in cold weather is simply attributable, is it not, to the cooling and hardening of the juices and gravies by the cold?

Ans. Yes, sir.

62. X-int. It was not the intention, was it, in the mode of packing, that these articles should stand up and cohere together; but this was an accident of the temperature in which they happened to be when opened?

Ans. Yes.

63. X-int. The cans used by Rumery & Burnham were cylindrical, flat-end cans, were they not?

Ans. Yes, sir; they were, and of uniform diameter.

64. X-int. Referring to the condition of the animal substances put up by this firm at the time of which you speak, and including the shell-fish, these statements apply substantially to them, do they not?

Ans. Yes, sir.

65. X-int. Where was Lewis doing his packing at the time of which you have testified?

Ans. On custom-house wharf, Commercial street.

66. X-int. These Portland packers all pursued substantially the same methods, did they not, and produced substantially the same product, did they not?

220 Ans. They did.

67. X-int. I notice in your affidavit given under the motion to dissolve the interlocutory injunction in this case that you mention the names of J. Winslow Jones and Wm. G. Davies as persons who, to your knowledge, had put up meat in 1863; these were Portland packers, were they not, and included within the terms of your last previous answer?

Ans. Yes, sir.

68. X-int. After the contents of a can was processed at the place of which you have knowledge and have spoken, the can was removed from the bath and punctured, and then the puncture sealed up, was it not?

Ans. Yes, sir.

69. X-int. Do you testify that there was a guard placed on the under side of the can-covers?

Ans. Yes, sir; there was always.

70. X-int. Then the product made by these people was a different one from that produced by complainants, in the particulars that you have enumerated, was it not?

Ans. It was.

71. X-int. When were you at work with Mr. Archdeacon; for how long; and the same question as to the Tolman concern?

Ans. I was at work for Mr. Archdeacon not quite three years, and about a year for Mr. Tolman.

72. X-int. On reflection do you not think that you began to work for Archdeacon in 1872?

Ans. Just after the fire; the spring following the great fire of 1871.

73. X-int. Was or not this working with or for Archdeacon for and the same as the Crystal Lake Pickling & Preserving Works?

Ans. Yes, sir.

Redirect examination by Mr. TOURTELLOTTE:

74. R. D. Int. In your direct examination, in describing the manner of processing, you did not state whether or not the aperture made in the can after it was removed from the water-bath was closed or soldered up; please state whether it was or was not soldered up after the air had been allowed to escape.

(Objected to.)

221 Ans. It was soldered up.

(Signed) J. H. C. MERRY.

Subscribed and sworn to before me this 20th day of Sept., A. D. 1878.

(Signed) JOHN G. REED,
Notary Public.

Adjourned until two o'clock p. m.

2 O'CLOCK P. M.

Parties and counsel present, pursuant to adjournment, and the taking of depositions resumed.

Deposition of William Archdeacon.

WILLIAM ARCHDEACON, a witness of lawful age, being duly sworn, deposes as follows:

By Mr. TOURTELLOTTE:

1. Int. What is your name, age, occupation, and place of residence?

Ans. William Archdeacon; age, fifty-four years; by occupation a pickler and preserver and manufacturer of canned goods; and reside at Oak Park, Cook County, Illinois.

2. Int. How long have you resided in this State and in Cook County?

Ans. About twenty-two years.

3. Int. How long have you been engaged in canning, packing, and preserving business?

Ans. About twenty-two years.

4. Int. When did you commence experimenting about putting up cooked canned meats—what year?

Ans. As near as I can recollect, in 1871.

5. Int. Did you at or about that time put up cooked canned meats and put them in the market here?

Ans. I think I didn't put any on the market till 1872.

6. Int. Did you in 1872 put up cooked corn beef here in cans hermetically sealed?

(Objected to.)

Ans. I did.

7. Int. Will you please give the process of preparing such meat: the manner in putting it up; its condition when put up? Please give a de-

tailed statement of the whole process of first preparing, putting it up, and getting it ready for the market.

(Objected to.)

222 Ans. I had several processes, but the one I decided upon was to take the beef after being properly cured, boil it, remove the bones, pack it in a can—we did not press it into the cans, that is, we did not have any machinery to press it—seal it up, boil it a given time, vented it so that the air could escape, soldered it u' 'gain, and boiled it again until it boiled enough to keep. In some of my experiments in that year I used a stick to press it in the cans. As to the pressing in, I desire to say that the can was full.

8. Int. Was any meat put up by you in this way during that year put upon the market for sale?

(Objected to.)

Ans. I can't say that any corned beef was put on the market that year. I can recollect of veal being sold in small quantities, and also ham and eggs and some poultry. I can't recollect of anything else.

9. Int. Have you any recollection of what year corned beef was put up in cans in the way spoken of and was put on the market?

(Objected to.)

Ans. I can't place any particular time, just now.

10. Int. What was the condition of the corned beef put up by you in 1872 when taken from the cans? I refer to its solidity.

Ans. When cold it would come out solid, so that it could be sliced.

11. Int. Did you put up any corned beef and other meats and send the same to the Vienna Exposition in 1873?

(Objected to.)

Ans. I did.

12. Int. Were the same put up in the manner heretofore described by you?

(Objected to.)

Ans. They were, with the exception of being packed more solid into the cans.

13. Int. Have you seen the corned beef put up by the complainants in this case?

(Objected to.)

Ans. I have.

14. Int. Is the appearance of such corned beef similar and alike that put up by you in 1872 and 1873?

(Objected to.)

Ans. Yes.

15. Int. What was the shape of the cans used by you in putting up your cooked meats in 1872 and 1873, and of those that were sent to the exposition?

(Objected to.)

Ans. They were round; some of them straight and some coned-shape.

223 16. Int. Will you produce one of those cans of meat put up by you at or about that time, and make the same an exhibit?

(Objected to.)

Ans. I do produce one, to be marked Defendant's Exhibit Archdeacon Can, J. G. R., Examiner.

17. Int. Was there any person in your employ, at the time you commenced or was engaged in the putting up of canned meats in 1872 and 1873, who took part in putting up such meats?

(Objected to.)

Ans. There was.

17. Int. Who was the person?

(Objected to.)

Ans. John C. Merry.

19. Int. Where in this State have you been engaged in putting up canned meats?

(Objected to.)

Ans. In Chicago and Crystal Lake, McHenry County.

20. Int. Can you produce any can of corned beef put up by you while doing business at Crystal Lake?

(Objected to.)

Ans. I think I can.

21. Int. Will you please produce one and have it marked as an exhibit?

(Objected to.)

Ans. I do produce one, to be marked Defendant's Exhibit Archdeacon Can No. 2, J. G. R., examiner.

22. Int. Under what name did you do business at Crystal Lake?

(Objected to.)

Ans. I first did business there in my own name; 1874, as near as I can recollect, I organized it into a company and went under the name of the Crystal Lake Pickling and Preserving Works.

Cross-examination, de bene esse, by Mr. CLIFFORD, no rights under the foregoing objections being waived:

23. X-int. Please give the earliest date on which you testify that you put up cooked meats in cans.

Ans. As near as I can recollect, 1872, but I think I put up meats of some kind earlier than that.

24. X-int. State the earliest date at which you will now swear you put up cooked meats in cans.

Ans. 1872.

224 25. X-int. You do not now swear, then, do you, to an earlier date at the present time?

Ans. No, sir.

26. X-int. Is your recollection as good now concerning what you have done in this respect as it ever was?

Ans. I think it is. I have memoranda from which I could refresh my recollection, from which I haven't done for several years—for a year at least. This is regarding the dates only.

27. X-int. Where was it that you thus began in 1872, as you have stated? Please answer particularly.

Ans. In the city of Chicago, at 91 South Water street.

28. X-int. How long, if at all, was it before you succeeded in preparing and canning meats successfully?

Ans. I met with very little success until I sent samples to the Vienna Exposition, and paid but very little attention to the business afterwards, being engaged in another business.

29. X-int. Then, since you have stated that you sent your meat to the exposition in 1873, your period of experiment extended from the time you began in 1872 up to the time you sent the goods in 1873, did it not?

Ans. That is so, yet I sold some of the meat in the mean time.

30. X-int. Can you give me any idea over how many months or what portion of the year this period of experiments extended?

Ans. I cannot.

31. X-int. Do you think it was six months?

Ans. Yes; longer.

32. X-int. Have you ever stated previously to this that you commenced to experiment in canning meats at Chicago in 1869?

Ans. I may have done so, and I think now that perhaps I did make some experiments at that time. By reference to my books I can give a more correct account as to dates of my experiments if desired.

33. X-int. To what persons and at what places did you sell any of the canned meat which you say you prepared and sold from the time you began in 1872 up to the time you sent some goods to the Vienna Exposition in 1873? Name all the persons and places that you can remember.

225 Ans. All the persons and places I can remember at present is Wm. Numsen & Sons and F. A. Wardner, all of Chicago. The amounts were small and I don't recollect the dates, but it was before the time mentioned—the Vienna Exposition.

34. X-int. What was your business, and where was it conducted in the city of Chicago, during this time between 1872 and 1873, of which you are speaking?

Ans. I was in the pickling and preserving business all the time; I was at the southeast corner of Franklin and South Water streets. The preserving business includes the packing of canned goods.

35. X-int. Did you have a store at that place?

Ans. No, sir; I had a store on Randolph street. The factory was first in the rear of the store on Randolph street, and then removed to the corner of Franklin and South Water streets.

36. X-int. How long before you sent the goods to the exposition did you move your factory to South Water street?

Ans. As near as I can recollect, three or four months.

37. X-int. Did you sell or offer for sale any of your canned meats in that store?

Ans. No, sir; not that I can recollect of.

38. X-int. Were any of your canned meats in that store, or for sale there, by any one?

Ans. I think not; they were not packed only for orders, and, as I said before, I paid but very little attention to their sale.

39. X-int. Did you attend to that store or have some one to attend to it for you during this time, and, if so, whom?

Ans. I did not attend to the store personally. I employed a person to attend to it for me; his name was Robert Stafford. I did not keep a full line of my goods in the store; there were some articles that I manufactured that other parties had the exclusive sale of, and I could not allow those articles to be sold in my own store until all contracts for said goods were filled. Canned meats were never put on sale in the Randolph street store.

40. X-int. If there were any canned meats on sale in that store at the time of which you are speaking with your name and brand
226 on the same, or were they or not some of the meats put up by you during this time, six months or more, of which we are speaking?

Ans. If there were any such they were experiments that could not be sold to the wholesale trade, and probably packed in different ways, but I do not recollect of any being on sale there.

41. X-int. Do you testify that none of the goods put up by you during this time, in the manner referred to in your direct testimony, were in that store for sale?

Ans. As far as I know there were none in that store for sale, yet there might have been.

42. X-int. Now, if there were any cans of canned meats in that store during that time with your name and brand, I simply ask you whether or not they would be a part of the meat canned by you of which you have spoken in your direct, or whether they would be a part of a product put up by some other process of which you have not spoken?

Ans. I would state that Mr. Stafford having full charge of the retail store, and the power to buy and sell, that I paid very little attention to the details of that part of my business, and was there very seldom, and relied entirely upon him for conducting it. I think if there was any canned meats in that store with my name and brand on them that they were of my packing. I would also state that I carried my manufacturing business on principally by filling orders received from jobbers and wholesale dealers taken before the goods were packed. This rule applied more especially to my canning business, and I did not carry any canned goods in stock. The retail store was kept for the purpose of disposing of odds and ends of goods that were left over from orders, and we packed goods of all kinds on orders as per sample given.

43. X-int. If Stafford bought any canned meats of Waidner, or procured them from him, with your name and brand on the cans, would they not be some of your packing of which you have spoken?

Ans. It would be likely they would be, but I could not tell.

44. X-int. Did you ever know of Waidner placing your name and brand upon any goods not put up by you?

Ans. I do not recollect of any such instance.

45. X-int. When was the Crystal Lake Company started?

227 Ans. The company was started, as near as I can recollect, in 1874. I commenced doing business there, I think, sometime in 1872.

46. X-int. Was this the association or company against which the Wilson Packing Company instituted suit for the infringement of their patents?

Ans. I believe it was.

47. X-int. Did you or not pursue substantially the same process in the canning of your meats in that company which you have described in this deposition?

Ans. With this exception we did: We packed the meat looser in the cans, and added a little gravy or gluten to it.

48. X-int. Then, in the Crystal Lake Company's process no attempt at the compressing or solidifying of meat in the can was made, was it?

Ans. The meat was packed in the can as tight as it could be packed with the fingers, then the gluten being added, and after it was properly processed and made cold it came out of the can solid and could be sliced.

49. X-int. Will you now answer my question, when I ask you to state whether in the more loose-packing process pursued by this company any attempt was made to solidify, by packing or pressure, the meat in the can?

Ans. No more than I have before stated.

50. X-int. Was the meat, as put up by this company, closely or loos'ly packed in the cans?

Ans. Closely.

51. X-int. In packing of the meat by this company, was or not the cans filled by the alternate introduction of meat and gravy, or gelatine and gravy and meat, and so on?

Ans. No; it was not.

52. X-int. Was there any gravy or gelatinous substances introduced into the cans with the meat?

Ans. There was.

53. X-int. Have you ever, previous to this, stated as follows: "That the meat so put up by him as aforesaid is similar in all respects as that put up by the complainants," meaning the Wilson Packing Company, and "that this deponent put up various kinds of cooked
228 meat, * * * and sent the same to the Vienna Exposition, and received from the officers of said exposition a medal for said cooked meat; that said meats so put up were put up in manner aforesaid. And this deponent says that when he so packed the said cooked beef and meats so sent to the Vienna Exposition the same were packed or compressed into the said cans with a pestle or stick. And this deponent says that about the year 1875, while he was engaged in putting up said meat as aforesaid, the said Wilson Packing Company commenced a suit against him and others for infringing the patent mentioned in complainants' bill"?

Ans. Yes; I have.

54. X-int. Was or not the suit spoken of in the extract contained in the last interrogatory a suit by the Wilson Packing Company against the Crystal Lake Company, of which you were a member, and yourself personally?

Ans. It was.

55. X-int. Did you or not give a deposition in that case as a witness in behalf of the defendants, and tending to show that the process pursued by the respondants was different from the one described in the complainants' patents?

Ans. I did give evidence on behalf of the company and myself in that case.

Adjourned until 10 o'clock a. m. on September 21st, 1878.

JOHN G. REID,
Notary Public and Special Examiner.

CHICAGO, ILLINOIS, *September 21st*, 1878—10 o'clock a. m.

Parties and counsel present, and cross-examination of the witness William Archdeacon continued by Mr. CLIFFORD.

56. X-int. State whether, before the present time, and in the deposition referred to, you did or did not say, describing the process pursued by the Crystal Lake Company, as follows: "We packed but very little of anything during that time in the meat line, and the most of any one kind we did manufacture was corn beef. The process of packing corn beef is as follows: The beef is salted in brine in the ordinary manner; the beef was then taken out of the brine and washed, put into a steam kettle, and a portion of pig's feet put with it. My recollection of the preparation is one pig's foot to ten pounds of beef. This depends somewhat on the size of the pig's feet. The kettle was covered as nearly steam-tight as possible; tightly covered and boiled in that way
229 until the bones could readily be taken from the meat. The meat was then taken out on a table and the bones taken from them. The marrow, if any was left in the bones, was returned to the kettle with the gravy; the gravy was then boiled down to a suitable thickness. The meat was cut up in small pieces by means of a knife or knives, say one inch or less in size. The empty can was taken, and a little of the gravy put in the can first, then some of the small pieces of the beef put in, and then a little more gravy, and so on till the can was full.

Then the meat was pressed down with the fingers to be sure that the meat was solidly in, and the gravy evenly mixed. The cans were then put into a water bath and made thoroughly hot; they were then soldered up air-tight," &c.?

Ans. That is about as near as I can recollect the evidence I gave.

57. X-int. Will you look at the signature of the paper now shown you; state whether or not it is yours, and whether or not signed to the description given in the foregoing interrogatory?

Ans. It is my signature, and is signed to the description referred to.

58. X-int. Now, in the 51st cross you have stated in answer to question, "In packing of the meat by this company, was or not the can filled by the alternate introduction of meat and gravy or gelatine, and gravy and meat, and so on?" "No, sir; it was not." And in this part of your deposition just quoted, given in May, 1876, you have stated, "A little of the gravy put in the can first, then some of the small pieces of the beef put in, and so on." Now, which of these statements is true?

Ans. They are both literally true. The reason I said, "No, there was not," was that when I went to make an explanation I was stopped by Mr. Clifford and told I must answer yes or no. Now, in the process that the Crystal Lake Company had they sometimes mingled the gelatine or gravy with the meat before it was put in the cans; in that case we only put a little gelatine in the bottom of the can and then filled up with the meat so wet with the gravy or gelatine, pressed it down solid with the fingers, then, if needed, added more gelatine or gravy, and then went on with the process. This explanation would have been made at the previous question if I had not been stopped, and at the time that question was put to me my mind was on that particular process which was followed by the Crystal Lake Company, as well as the other process described.

230 59. X-int. Then in the Crystal Lake Company's works, as a matter of fact, you had two processes which you have now described, did you not—both of them including the use of the gravy in the manner described?

Ans. Yes, sir.

60. X-int. Now, if you did not state in the deposition before referred to, given in behalf of the Crystal Lake Company, a*nd* description of their process as follows: "Int. Were there any cans of preserved meat manufactured or put up by said works by any other or a different process than that you have just described? Ans. Not that I know of"? Will you look at the deposition over your signature, and see if you do not find that answer there, referring to the process spoken of in the 56th cross?

Ans. I have looked at the deposition spoken of, and find the answer there as described. In explanation, I would state that I consider the two processes herein described amounting to one and the same thing, the result sought for being the same, and material used being the same, and proportions also being the same.

61. X-int. Now, then, you do not state, as you did in the 59th cross, a few moments ago, do you, that there were two processes carried on at the Crystal Lake Works?

Ans. If you choose to call them two separate processes it might be counted so, but I claim that they both attain to the same, and could be called one or two processes as you choose, and as you called them two processes I agreed with you, but the details are here to be seen.

62. X-int. Did you not state in the deposition given in May, 1876, in behalf of the said Crystal Lake Company already referred to, in answer

to question, "They never used any sticks to poke the meat into the can, or spread it around in the can, or for any other purpose? Ans. Not that I know of"? And did you not state in the affidavit made in this case January 15th, 1878, as follows: "And this deponent says that when he so packed the said cooked beef and meats so sent to the Vienna Exposition the same were packed or compressed into the said cans with a pestle or stick. And this deponent says that about the year 1875, and while he was engaged in putting up said meat as aforesaid, the said Wilson Packing Company commenced a suit against him and others," &c.?

231 Ans. I did make these two statements, and I make this explanation. The meat that we packed for the Vienna Exposition was packed on my own account—not on account of the Crystal Lake Company, as it was not then in existence—and was packed with a pestle or stick, as described in my affidavit of January, 1878. In regard to the statement that the Crystal Lake Company did not use any sticks to poke the meat in the can is true; they did not. The word "aforesaid" should not have been in my affidavit, as is herein quoted. I did not see it at the time I examined it, or should have had it erased.

63. X-int. Will you examine the manuscript paper now shown you, and state whether that is the affidavit given by you in this case January 15, 1878, and whether you do not find the passage referred to clearly and legibly written therein, and whether your oath and signature is appended thereto?

Ans. I do.

64. X-int. Is it your practice in matters of this kind to make oath to statements clearly and legibly written without fully informing yourself upon the meaning and contents of the same?

Ans. I generally examine carefully all papers before subscribing to them, but, unfortunately, in this case, I overlooked the above-quoted "aforesaid."

65. X-int. Now you state, do you not, that the meat which was packed in the cans with the pestle or stick was the meat which received the medal at the Vienna Exposition?

A. There was different kinds of meats, game, and poultry sent by me to the Vienna Exposition in 1873. Some of it was packed with a pestle or stick; some of it was not. I drew a premium on the lot.

66. X-int. Is this statement, "and this deponent says that when he so packed the said cooked beef and meats so sent to the Vienna Exposition the same were packed or compressed into the said cans with a pestle or stick;" also, "that this deponent put up various kinds of cooked meat, such as mutton, veal, sausage, and beef, in the year 1873, and sent the same to the Vienna Exposition in Austria, and received from the officers of said exposition a medal for said cooked meats; that said meats so put up were put up in the manner aforesaid," true or not?

232 Ans. True.

67. X-int. Then, in this affidavit, you omitted to state that any of the meats were put up by any other process than the one therein mentioned, did you not?

Ans. The meats, consisting of beef, veal, mutton, etc., sent to the Vienna Exposition, was pressed with a pestle or stick—the game and poultry was not. The reason the game and poultry was not mentioned in my former affidavit was that the question particularly was as to meats.

68. X-int. Now, when you had received the Vienna medal for your

compressed beef in 1873, why did you not pursue this process and continue to manufacture so excellent a product when you came to organize and carry on the Crystal Lake Works?

Ans. I did not receive the medal on any one product any more than another, and paid very little attention to the meat packing business, and done very little about it.

69. X-int. Then the corn beef which was packed by the Crystal Lake Company, as stated by you, was not packed in the same manner as the cooked beef for which you received the Vienna medal, was it?

Ans. It was packed in the same manner, excepting there was gelatine added, and not pressed so hard in the cans.

70. X-int. Have you not, in this deposition, taken exceptions to the words "as aforesaid" on the ground that the sentence begin'ing "and this deponent says that about the year 1875," etc., was description of a different process from the one described in the sentence immediately preceeding?

Ans. Yes, I did; the process being different as to the use of pestle or stick for the goods packed for the Vienna Exposition; and the goods packed by the Crystal Lake Company the pestle or stick was not used, and gelatine or gravy added.

71. X-int. Was or not about one-fifth of the capacity of the Crystal Lake goods filled with gravy?

Ans. I do not think it was as much as that; but I never measured it.

72. X-int. If you so stated in your deposition in the suit against the Crystal Lake Company and yourself, would it be likely to be correct or not?

233 Ans. It would be likely be correct.

73. X-int. And was or not the meat which took the Vienna medal "put up without any moisture or water, so that when taken out of said cans the same would be solid and could be cut with a knife," as stated in your affidavit?

Ans. Yes, sir.

74. X-int. Now have you not represented that the beef which was put up by the Crystal Lake Company, to which you say you gave but very little attention, was like the beef that received the Vienna medal?

Ans. I do not recollect of making any such positive representation.

75. X-int. Will you now examine a label shown you? State whether it is a Crystal Lake Company label, and whether it has on it a fac simile of the Vienna medal.

Ans. This is a Crystal Lake Company lab*le*, and has on it a fac simile of the Vienna medal. (Said lab*le* is here offered in evidence and marked "Complainants' Exhibit, Crystal Lake Co.'s Lab*le*, J. G. R., examiner.")

76. X-int. At the time that this label was issued or ones like it, were you not president of the company?

Ans. I was.

77. X-int. Did you not have the general supervision of the process of preparing the meat, so as to be able to describe them as you have done in this and other depositions?

Ans. I had.

78. X-int. This medal and label were known to you, I presume?

Ans. They were.

79. X-int. You have stated that you have used a conical can to contain preserved meat; when did you so use it?

Ans. I cannot state when I commenced to use it; as near as my rec-

ollection serves me, the first use I made of it to any extent was in 1872 or 1873. This my mind is not perfectly clear on.

80. X-int. Do you make oath that you ever made and used any for this purpose earlier than the commencement of 1874?

(Objected to.)

Ans. I can't place the time.

234 81. X-int. Will you make oath that you made and used any of these cans for this purpose earlier than the last half of the year 1874?

Ans. I cannot state the time.

82. X-int. Will you make oath that you did in fact make and use any of these cans for this purpose in said latter half of 1874?

Ans. I never made the cans. I had them made. To the best of my recollection, but I will not be positive, I used them in 1874.

83. X-int. Will you swear positively that you ever had made for you, and used for this purpose, cans of this kind prior to the beginning 1875?

Ans. I will not swear positively, but I think I did.

84. X-int. State who made your first conical cans for you, and where they were made.

Ans. The first conical cans, as near as I can recollect, that I ever used were made on State street. I disremember now the name of the firm who made them.

85. X-int. Have you ever stated to either of the Wilson Brothers that in the attempt to preserve their corned beef they were attempting something which had never been done and couldn't be done?

Ans. I may or may not.

86. X-int. You do not, then, deny it, do you?

Ans. I do not now call to mind the circumstance.

87. X-int. (Question repeated.)

Ans. I do not deny it, but I cannot recollect any such circumstance.

88. X-int. Will you annex to and make part of this deposition your deposition given in the suit, The Wilson Packing Company vs. The Crystal Lake Pickling & Preserving Works et al., given in Chicago May 25th, 1876, and to which references have been made in this examination; also your affidavit given in this case, sworn to the 15th day of January, A. D. 1878, the said affidavit to be annexed by a certified copy?

Ans. I will.

89. X-int. Will you examine the case now shown you and state whether it is a can of meat put up by you, or under your supervision or direction, and the date of its being canned, as nearly as you can give it?

235 Ans. I have no doubt but that this is a can of turkey packed under my supervision or direction, yet I could not swear that it was. There are two labels on this can, so I cannot tell really what is in the can. (One label is here cut open.) It is marked turkey on the under label. It has been canned for several years. I cannot state its date.

(Complainants here introduce the can in evidence, the same to be marked "Complainants' Exhibit Archdeacon Can, J. G. Reid, special examiner.")

90. X-int. State whether in the suit The Wilson Packing Company vs. The Crystal Lake Pickling and Preserving Works et al. you introduced the deposition of one William H. Railton for the defendants, the same being given January 20th, 1876.

Ans. I did introduce the evidence of W. H. Railton. I don't remember the date of his testimony.

91. X-int. Are you familiar with the signature of this Mr. Railton, or were you present at the time the deposition was signed?

Ans. I was not present at the time the deposition was signed. I think I would know his signature.

92. X-int. Will you examine the signature to this paper now shown you, and state whether in your opinion it is the handwriting of the said Railton?

Ans. I have examined the signature and think it is his handwriting.

(Complainants here introduce in evidence the deposition of said Railton, to be marked "Complainants' Exhibit Railton Deposition, J. G. R., special examiner.")

(Counsel for defendant objects to its introduction.)

93. X-int. Have you ever stated prior to 1875 to either of the Messrs. Wilson, or to any other person, that it was impossible to preserve meat solid in the can without the addition of gravy or liquids, and that he, Wilson, was throwing away his money in attempting to do it?

Ans. I recollect of no such statement.

94. X-int. Did you or not make such a statement in substance to one Robert Stafford in the city of Chicago prior to 1875?

Ans. I have no recollection of any such statement.

236 95. X-int. Do you remember of any such statement to either of said parties during the year 1874 or 1875?

Ans. I do not.

Redirect examination of said witness by Mr. TOURTELLOTTE:

96. R. D. Int. You stated in your examination yesterday in answer to 53 X-int. that you desired to make an explanation in connection with your answer to same; you can now do so, if you desire.

(Objected to.)

Ans. The explanation I would make is that the meats sent by me to the Vienna Exposition in 1873 was packed in the cans with a pestle or stick. Now, the meats that were packed by the Crystal Lake Company were packed by hand, and the gelatine or gravy used therewith. The word "aforesaid" occurring in the fourth line from the top of the 27th page of my printed affidavit was overlooked by me at the time of my subscribing the same.

(Signed) WILLIAM ARCHDEACON.

Subscribed and sworn to before me this 21st day of September, A. D. 1878.

JOHN G. REID,
Notary Public & Special Examiner.

Deposition of Frederick A. Waidner.

FREDERICK A. WAIDNER, a witness of lawful age, being duly sworn, deposes and says, in answer to questions asked by Mr. Tourtellotte, on behalf of defendant:

1. Int. What is your name, age, and occupation, and place of residence?

Ans. Frederick A. Waidner; age, thirty-six; dealer in canned goods; reside in Chicago, No. 45 & 47 River street.

2. Int. How long have you been engaged in dealing in canned meats and fruits in the city of Chicago.

ollection serves me, the first use I made of it to any extent was in 1872 or 1873. This my mind is not perfectly clear on.

80. X-int. Do you make oath that you ever made and used any for this purpose earlier than the commencement of 1874?

(Objected to.)

Ans. I can't place the time.

234 81. X-int. Will you make oath that you made and used any of these cans for this purpose earlier than the last half of the year 1874?

Ans. I cannot state the time.

82. X-int. Will you make oath that you did in fact make and use any of these cans for this purpose in said latter half of 1874?

Ans. I never made the cans. I had them made. To the best of my recollection, but I will not be positive, I used them in 1874.

83. X-int. Will you swear positively that you ever had made for you, and used for this purpose, cans of this kind prior to the beginning 1875?

Ans. I will not swear positively, but I think I did.

84. X-int. State who made your first conical cans for you, and where they were made.

Ans. The first conical cans, as near as I can recollect, that I ever used were made on State street. I disremember now the name of the firm who made them.

85. X-int. Have you ever stated to either of the Wilson Brothers that in the attempt to preserve their corned beef they were attempting something which had never been done and couldn't be done?

Ans. I may or may not.

86. X-int. You do not, then, deny it, do you?

Ans. I do not now call to mind the circumstance.

87. X-int. (Question repeated.)

Ans. I do not deny it, but I cannot recollect any such circumstance.

88. X-int. Will you annex to and make part of this deposition your deposition given in the suit, The Wilson Packing Company vs. The Crystal Lake Pickling & Preserving Works et al., given in Chicago May 25th, 1876, and to which references have been made in this examination; also your affidavit given in this case, sworn to the 15th day of January, A. D. 1878, the said affidavit to be annexed by a certified copy?

Ans. I will.

89. X-int. Will you examine the case now shown you and state whether it is a can of meat put up by you, or under your supervision or direction, and the date of its being canned, as nearly as you can give it?

235 Ans. I have no doubt but that this is a can of turkey packed under my supervision or direction, yet I could not swear that it was. There are two labels on this can, so I cannot tell really what is in the can. (One label is here cut open.) It is marked turkey on the under label. It has been canned for several years. I cannot state its date.

(Complainants here introduce the can in evidence, the same to be marked "Complainants' Exhibit Archdeacon Can, J. G. Reid, special examiner.")

90. X-int. State whether in the suit The Wilson Packing Company vs. The Crystal Lake Pickling and Preserving Works et al. you introduced the deposition of one William H. Railton for the defendants, the same being given January 20th, 1876.

Ans. I did introduce the evidence of W. H. Railton. I don't remember the date of his testimony.

91. X-int. Are you familiar with the signature of this Mr. Railton, or were you present at the time the deposition was signed?

Ans. I was not present at the time the deposition was signed. I think I would know his signature.

92. X-int. Will you examine the signature to this paper now shown you, and state whether in your opinion it is the handwriting of the said Railton?

Ans. I have examined the signature and think it is his handwriting.

(Complainants here introduce in evidence the deposition of said Railton, to be marked "Complainants' Exhibit Railton Deposition, J. G. R., special examiner.")

(Counsel for defendant objects to its introduction.)

93. X-int. Have you ever stated prior to 1875 to either of the Messrs. Wilson, or to any other person, that it was impossible to preserve meat solid in the can without the addition of gravy or liquids, and that he, Wilson, was throwing away his money in attempting to do it?

Ans. I recollect of no such statement.

94. X-int. Did you or not make such a statement in substance to one Robert Stafford in the city of Chicago prior to 1875?

Ans. I have no recollection of any such statement.

236 95. X-int. Do you remember of any such statement to either of said parties during the year 1874 or 1875?

Ans. I do not.

Redirect examination of said witness by Mr. TOURTELLOTTE:

96. R. D. Int. You stated in your examination yesterday in answer to 53 X-int. that you desired to make an explanation in connection with your answer to same; you can now do so, if you desire.

(Objected to.)

Ans. The explanation I would make is that the meats sent by me to the Vienna Exposition in 1873 was packed in the cans with a pestle or stick. Now, the meats that were packed by the Crystal Lake Company were packed by hand, and the gelatine or gravy used therewith. The word "aforesaid" occurring in the fourth line from the top of the 27th page of my printed affidavit was overlooked by me at the time of my subscribing the same.

(Signed) WILLIAM ARCHDEACON.

Subscribed and sworn to before me this 21st day of September, A. D. 1878.

JOHN G. REID,
Notary Public & Special Examiner.

Deposition of Frederick A. Waidner.

FREDERICK A. WAIDNER, a witness of lawful age, being duly sworn, deposes and says, in answer to questions asked by Mr. Tourtellotte, on behalf of defendant:

1. Int. What is your name, age, and occupation, and place of residence?

Ans. Frederick A. Waidner; age, thirty-six; dealer in canned goods; reside in Chicago, No. 45 & 47 River street.

2. Int. How long have you been engaged in dealing in canned meats and fruits in the city of Chicago.

Ans. About ten years.

3. Int. Have you been engaged in said business alone or in connection with some firm?

237 Ans. Part of the time when it first started here I had charge of the business as a branch of a Baltimore concern, Numsen, Carroll & Co. Afterwards I carried it on alone.

4. Int. Were you engaged in such business prior to your commencing it here in Chicago? If so, where and how long?

Ans. At Baltimore, Maryland, for about twelve years previous to coming here.

5. Int. During the time you have been engaged in such business have you been familiar with the various kinds of canned meats put up in the United States?

Ans. Yes, sir.

6. Int. With what firm or firms, if any one, did you have any dealings in regard to canning meats during the time you were in Baltimore?

Ans. J. Winslow Jones, of Portland, Maine; Rumerey & Burnham, of Portland, Maine; Aaron Kemp, of New York City, the firm afterwards Kemp, Day & Co.; N. H. Dudley, of New York City. That is all I recall now; others, probably.

7. Int. Are you acquainted with and do you know of the canned meat put up by the complainants in this suit?

Ans. Yes, sir.

8. Int. How long have you known of such meats so put up by the complainants?

Ans. I have seen their goods ever since they commenced packing here in Chicago.

9. Int. In what way were the meats which you say you saw and dealt in while in Baltimore put up?

(Objected to.)

Ans. Put up in hermetically-sealed cans, cooked.

10. Int. What kind of meat did you see put up in that way?

(Objected to.)

Ans. Beef, veal, mutton, sausage.

11. Int. Do you know the appearance of such meat when in such cans?

(Objected to.)

Ans. Appearances were different. Some were packed dry, and some had considerable liquor in them.

12. Int. What kind of meats were packed dry?

(Objected to.)

238 Ans. I have seen all kinds of them dry. Some packers use more liquor than others.

13. Int. In what form or condition was the meat when in the cans, as to solidity?

(Objected to.)

Ans. I have seen some that opened out solid, and some that came out in pieces. When there is considerable liquor in the can the contents come out in pieces.

14. Int. Could you cut such meat, that you say came out of the can solid, with a knife in slices?

(Objected to.)

Ans. Yes, sir.

15. Int. What firm or person put up or canned meats, while you was in business in Baltimore, which would come out of the can in a solid form and could be cut in slices?

(Objected to.)

Ans. Kemp, Day & Co. And goods packed by Numsen, Thomas & Co., of Baltimore, and others who I do not now recall.

16. Int. Was the appearance of such meats while in the can, and when taken from the can, similar to that put up by the complainants?

(Objected to.)

Ans. It wasn't the same in color—their meat is redder than the others.

17. Int. Was it in other respects besides color similar?

(Objected to.)

Ans. Those that were packed without much liquor were similar in appearance.

18. Int. State if such meats, so put up by parties, were sold in the market at Baltimore during the time you were in business there?

(Objected to.)

Ans. Yes, sir.

19. Int. Are you acquainted with the process under which said meats were put up?

(Objected to.)

Ans. In a general way. I never paid much attention to that part of the business.

20. Int. Did the firm with which you were engaged, put up any canned meats while you were with them?

(Objected to.)

Ans. Yes, sir.

21. Int. Was you acquainted with their process of putting up canned meats?

(Objected to.)

239 Ans. Only, as I answered before, in a general way. I never paid any particular attention to the process.

22. Int. Of what were the cans composed that contained the meat that you say was put up by the firm in Baltimore, when you were with it?

(Objected to.)

Ans. Tin-plate and solder.

23. Int. Was the meat contained in the cans cut into fine pieces, or was it in its natural state?

(Objected to.)

Ans. It was cut into pieces small enough to get into the cans.

24. Int. How large were the cans?

(Objected to.)

Ans. We packed in one, two, four, and six pound cans.

25. Int. State the condition of the meat when put into the cans, as to whether it was cooked or raw.

(Objected to.)

Ans. It was generally cooked—I have seen it packed raw.

Cross-examination, "de bene esse," conducted by Mr. CLIFFORD, not waiving any rights under objections.

26. X-int. Have you ever witnessed the whole process of packing the cooked meats into the cans, referred to by you, as having been done at Baltimore while you were employed there?

Ans. No; I don't remember to have ever followed the process right through.

27. X-int. Then, as far as your acquaintance extends with that process, was it really the design of the packers that the meat should so be

compressed into the cans under such conditions that it would take the form of the can, which would serve as a mould to impart permanent shape to the same, both when in and when taken out of the cans?

Ans. I think not.

28. X-int. Was it not the object of that system of packing simply to fill the can with the substance to be preserved, so far as any pressure was involved, if any?

Ans. Yes, sir.

29. X-int. And when this could not conveniently be effected, juices or gravies were employed, were they not, to fill the interstices between the pieces of meat, and also to fill the can?

240 Ans. Yes, sir.

30. X-int. These juices were also sometimes employed, were they not, to make weight in the can?

Ans. I don't think that they did for that purpose.

31. X-int. Were or not the juices or pieces of meat put into the cans as large as they could be to go in conveniently into the open top cans?

Ans. Yes, sir.

32. X-int. In this earlier process, of which you speak, there was not cutting of the meat into fine pieces under conditions to enable it readily to be moulded into a cake or block, as is the case with the complainants, was there?

Ans. Yes. Some kinds. Sausage meat, for instance, could be moulded, but with the other meats that was never had in view. Sausage meat would be moulded into cakes when taken out of the can, but the other meats would not.

33. X-int. What I desire to enquire is, whether at that time it was the idea of the packer, by previous preparation and pressure into the cans of this kind of meat, to enable it to both closely fill the can and take shape from it as a mould when it came out?

Ans. No, sir.

34. X-int. These descriptions of yours apply, do they not, Mr. Waidner, to all of the canned meats with which you have become acquainted, until you saw those of the complainant?

Ans. Yes, sir.

(Signed) FREDERICK A. WAIDNER.

Subscribed and sworn to before me this 21st day of Sept., A. D. 1878.

JOHN G. REID,
Notary Public and Special Examiner.

The further taking of depositions is adjourned until Monday, September 23d, A. D. 1878, at ten o'clock a. m., at same place.

JOHN G. REID,
Notary Public and Special Examiner.

Chicago, Illinois, September 23rd, 1878, parties and counsel present, pursuant to adjournment. Mr. Clifford here introduced the following stipulation:

241 *Stipulation.*

Circuit court of the United States, of the northern district of Illinois.

WILSON PACKING CO. ET AL. *vs.* WILLIAM B. CLAPP. } In equity.

It is hereby agreed in the above-entitled cause that Arthur A. Libby,

Archibald McNeil and Charles P. Libby, of the firm of Libby, McNeil & Libby, are owners in the franchises of the patent referred to in the bill of complainants, and are entitled to be named as complainants therein and to join in the suit under said patents, and that proof of said title and ownership is waived by defendant, and need not be put into the case by complainants.

ELDRIDGE & TOURTELLOTTE,
Solicitors and Counsel for Defendant.

Deposition of William B. Clapp.

WILLIAM B. CLAPP, a witness of lawful age, being produced, deposes as follows:

Examination by Mr. TOURTELLOTTE:

1. Int. What is your name, age, occupation, and place of residence?

Ans. William B. Clapp; forty-seven years old; by occupation, a wholesale jeweler, and reside in the city of Chicago, Cook County, Illinois.

2. Int. Do you know W. J. and J. A. Wilson, stockholders and officers of the Wilson Packing Company, one of the complainants?

Ans. I do.

3. Int. How long have you known them?

Ans. About ten or eleven years.

242 4. Int. Where did you first become acquainted with them?

Ans. In Chicago.

5. Int. Did you ever have any dealings or business with them in regard to putting up canned meat? If so, when and where?

Ans. I have, in 1873, on Michigan avenue and on Canal street, Chicago.

6. Int. What were they doing in regard to putting up meats at that time?

Ans. Working hard to put meat in cans and have it keep.

7. Int. In what way were you first connected with them?

Ans. I invested a small amount of money; was to have a share of the profits and do no work.

8. Int. Do you remember the time when the complainant, Wilson Packing Company, was formed?

Ans. May, 1874, I think it was.

9. Int. How long had you been engaged with them in endeavoring to put up meats prior to this time?

Ans. I should say about six months.

10. Int. How long before the organization of the company was it that the patent for putting up meats mentioned in this suit was perfected?

Ans. Two or three months, I should think.

11. Int. How much money had been invested by you in this matter of putting up meats prior to the organization of this company?

Ans. I could not say; a number of thousand of dollars.

12. Int. Who became the owners of the stock issued by the Wilson Packing Company after its organization?

Ans. William J. Wilson, John A. Wilson, M. E. Hanley, and William B. Clapp.

13. Int. How much stock was issued to each of said parties?

Ans. It was divided equally. The capital stock was one hundred thousand dollars; each of said parties had stock to the amount of twenty-five thousand dollars.

14. Int. What, if anything, was paid by yourself and Mr. Hanley for said stock?

Ans. Nothing.

243 15. Int. How long were you connected with said company; up to what time?

Ans. Up to April, 1877.

16. Int. What became of the stock that yourself and M. E. Hanley had at that time?

Ans. Gave it to the Wilsons.

17. Int. Did you or Hanley receive any compensation for it?

Ans. We did not.

18. Int. Was the stock you held at that time considered by the Wilsons and yourself of any value?

Ans. It was not by me; I could not say how the Wilsons valued it.

19. Int. Was it taken or considered of any value in your settlement with the Wilsons when you gave it up to them?

Ans. No; not a cent.

20. Int. Was it taken or considered of any value at the time you received such stock?

Ans. We considered it valuable then.

21. Int. What, if anything, did you receive from the Wilsons, or the Wilson Packing Company, at the time you surrendered your stock to the Wilsons?

Ans. One-half of the profits.

22. Int. Did you receive from them any sum of money or valuable thing, except the profits that had been realized from the business of the company, from the time of its organization up to that time?

Ans. I did not, except I received a salary for services as president of the company.

23. Int. Who were the owners of the stock of the company at the time you gave yours to the Wilsons, except that which you and Hanley owned?

Ans. No one except the Wilsons. There was a little in the names of two other parties, but I controlled it and it passed with mine to the Wilsons.

24. Int. Have you had any connection with this company since that time?

Ans. I have not.

244 25. Int. Of what did the property of the company consist at the time you gave up your stock, as you have stated?

Ans. Buildings, machinery, and stock in trade and cash in hand.

26. Int. From what source was the money derived with which the stock was purchased—I mean the stock in trade?

Ans. I could not say.

27. Int. Was or not the stock in trade purchased from the profits of the business, and with such money as was borrowed by the company?

Ans. It was purchased with such profits and money borrowed.

28. Int. Have you any knowledge of putting up meat in cans prior to your becoming connected with the Wilsons?

Ans. I knew there had been meat put up in cans before.

29. Int. Had you any practical knowledge of putting up meat in cans prior to that time?

Ans. I had not.

30. Int. Did you or not furnish the money or any considerable portion of it for experimenting in putting up canned meats prior to the organization of the company?

Ans. I did.

31. Int. Was any of the capital stock of the Wilson Packing Company invested in the Wilson meat canning patents?

Ans. The money that was used in the business was used in obtaining the patents, the same as any other thing.

32. Int. At the time that you went out of the company what office, if any, in the company did you hold?

Ans. I was president.

33. Int. How long had you held that office?

Ans. From its first organization.

34. Int. At the time you went out of the company, did you consider the Wilson patents, the ones mentioned in this suit, of any value whatever—you, as president of the company?

Ans. I did not.

35. Int. Did you ever see any meat put up in cans in a solid form, which were put up prior to the issuing of the Wilson patents?

(Objected to.)

245 Ans. I saw meat put up in cans in a solid form at Boston, which they said was put up before these patents. I saw it after the Wilson patents were out.

(Ans. objected to.)

36. Int. By whom was such meat put up?

(Objected to.)

Ans. Underwood & Co., of Boston, and I saw some in New York. It was shown me by Mr. Kemp, but I do not know who put it up.

(Ans. objected to.)

37. Int. What kind of canned meats was it that your saw in Boston?

(Objected to.)

Ans. Canned beef.

38. Int. Was such meat so put up by Underwood & Co. in a solid form in the can?

(Objected to.)

Ans. It was.

39. Int. Did or did it not bear any resemblance to the meat put up by the complainants under these patents?

Ans. It did.

40. Int. Was it in a condition so that it could be sliced after taking it from the can?

(Objected to.)

Ans. It was.

41. Int. What was the condition of the meat shown you by Kemp in New York?

(Objected to.)

Ans. The same as Underwood's.

Cross-examination, de bene esse, conducted by Mr. CLIFFORD, not waiving any rights under the foregoing objections:

42. X-int. The patent for the process of canning and packing meat was assigned by the Wilsons, yourself, and another to the company, and the stock was issued for the patent, was it not?

Ans. I think it was.

43. X-int. This deed is shown on pages 38 and 39 of the printed record?

Ans. It is.

44. X-int. How much was paid you by the company, aside from the five or six hundred salary, when you dissolved your connection with it?

Ans. One hundred and sixty-two thousand five hundred dollars in money.

246 45. X-int. At this time did you turn over anything else to the company, besides the shares held and controlled by you?

Ans. I turned over my interest in the profits that had been made.

46. X-int. After dissolving your connection with the Wilson Packing Company, did you establish any relations with any other company; if so, what ones, which was engaged in the canning of beef?

(Objected to on the ground that this is not proper cross-examination.)

Ans. I did, with the St. Louis Beef Canning Company.

47. X-int. What relation did you occupy towards this company?

(Objected to on the same ground as last shown.)

Ans. I was a stockholder in it.

48. X-int. Did you also dispose of their goods in New York City?

(Objected to upon the same ground as above.)

Ans. I did.

49. X-int. To what points did you bill or ship their goods from your place or New York City?

(Objected to for the same reason as above.)

Ans. Different parts of the country.

50. X-int. Will you look at the can of meat now shown you, and marked by four parallel lines on the top end, the same being one of "Exhibit Complainants' One Dozen Canned Meat," and state whether it is one of those articles put up by the St. Louis Beef Canning Company, and sold by you?

(Objected to.)

Ans. I couldn't say as it was put up by the St. Louis Beef Canning Company.

51. X-int. Please state whether or not, in all particulars of external appearance, it is like the article put up by them and sold by you.

Ans. It looks a good deal the same—something the same.

52. X-int. Do you notice any differences between the external appearances of this can and the ones you sold in New York as and for the product of the St. Louis Beef Canning Company?

Ans. It looks something the same.

53. X-int. If such a can was returned to you by a purchaser, would you not, when thus selling the goods in New York, have consid-

247 ered the article as the product of this company?

(Objected to.)

Ans. I presume I might.

54. X-int. Have you any doubt in your own mind but that this can, judging from its external appearance, is one of the product of this company?

(Objected to.)

Ans. It is the same shaped can.

55. X-int. Has it not also the same labels, trade-mark the same, applied in the same way as those of that company?

(Objected to.)

Ans. Something the same.

56. X-int. Has it not also the same stamp applied to the smaller end of the can?

(Objected to.)

Ans. Something the same.

57. X-int. Please name, in a general way, parts of the country to which you shipped or sent the goods you sold of the kind enquired, in New York?

(Objected to.)

Ans. Portland, Boston, Providence, and other cities north and south.

58. X-int. When did you cease doing this business in New York City, of which you have spoken?

(Objected to.)

Ans. November, 1877—some time during that month.

59. X-int. State, as nearly as you can, for how long prior to November, 1877, you had conducted this business in New York City.

(Objected to.)

Ans. I should think about five months.

60. X-int. Will you please point out any difference between the cans herein enquired about, as to external appearance, and the ones of the same size used by the St. Louis Beef Canning Company?

(Objected to.)

Ans. I could not.

61. X-int. Please state whether or not you had agents in Philadelphia and other cities for the sale of this article while you was selling in New York.

(Objected to.)

Ans. I did.

62. X-int. And the goods were upon all occasions sold by you to them, were they not?

(Objected to.)

Ans. Yes.

248 63. X-int. While you were engaged with the Wilson Packing Company did you or not go to England in the furtherance of the sale of their canned corn beef?

(Objected to.)

Ans. I did.

64. X-int. Were you or not in England some time; did you or not familiarize yourself with the condition of the markets there, and with the different kinds of canned meats manufactured and sold there?

(Objected to.)

Ans. Somewhat.

65. X-int. On your return to this country did you or not state to the Messrs. Wilson and to Mr. A. A. Libby that, in the opinion of Cross & Blackwell and John McCall, *that* this article was a good one and wholly new to them, and different from any other canned meats with which they were acquainted, or substantially this?

(Objected to.)

Ans. I might have done so.

66. X-int. Did you or not state to these gentlemen, or either of them, to the effect that you were told by some member of Cross & Blackwell that they had determined to sell no more canned meats except those of their own manufacture, but that this article was so different from anything in this line that they had previously handled that they would take into consideration the selling of the goods, or words to that effect?

(Objected to.)

Ans. I might have said so.

67. X-int. Will you now please state whether or not you remember of making the statement enquired about in the last question?

(Objected to.)

Ans. I might have made the statement.

68. X-int. I call your attention to the fact that I ask you whether or not you now remember of making such a statement, or whether you will testify that you have forgotten that you made it?

(Objected to.)

Ans. I made some such statement.

69. X-int. Referring to the meat which was shown you by Underwood, of which you have testified, did you open or see opened any of those cans?

(Objected to.)

Ans. I saw them opened.

249 70. X-int. Before the can was opened, could you or not, by shaking it, detect the movement of the contents within the can?

(Objected to.)

Ans. Well, I did not shake it; I think not.

71. X-int. Can you testify that the can was filled with meat to the same effect and purpose as the cans of the complainants of the St. Louis company?

(Objected to.)

Ans. Could not say the can was full, but it was solid what was there.

72. X-int. Was the meat to your knowledge any more solid than the natural condition of a piece of cooked meat thus canned?

(Objected to.)

Ans. I don't know; it was solid.

73. X-int. You have had experience with the complainants' and the St. Louis Co.'s meat. Now I ask you if the meat of Underwood was packed and compressed into the can under such conditions as to take the form of the can permanently, which can served as a mould for the contents, which, when taken from the can, maintained that form by itself?

(Objected to.)

Ans. I don't think it did retain the form, but it was solid meat.

74. X-int. That is, it was a solid piece or pieces of meat, was it not?

(Objected to.)

Ans. Solid piece or pieces of meat.

75. X-int. The can was a cylindrical, straight-sided can, was it not?

(Objected to.)

Ans. I don't remember; think it was a round can in the form of a tube.

76. X-int. If there was more than one piece of meat in these cans, such as Underwood showed you, each piece would come out solid by itself, would it not?

(Objected to.)

Ans. No; sliced right down through.

77. X-int. What, if anything, filled that space in the can not filled by the meat?

Ans. Don't know; think there was nothing but meat in the cans.

78. X-int. Was it or not the fact that in that style of packing as large pieces of meat were put into the cans as could be conveniently introduced?

(Objected to.)

250 Ans. Didn't notice.

79. X-int. How large was the piece which came out of the can which you saw opened?

(Objected to.)

Ans. It all came out in a lump.

80. X-int. Was Charles P. Libby with you and Mr. Evarts when this meat was shown?

(Objected to.)

Ans. They were.

81. X-int. Who else, if any one, was present besides these already named?

Ans. Mr. Tucker, Wilson Packing Company's agent.

82. X-int. Was or not the Kemp and Day meat of substantially the same character as the Underwood?

(Objected to.)

Ans. It was.

83. X-int. Now were either of these prepared by cutting up, and the exact filling of the can by packing and pressure, so as to receive the form of the interior of the can in the same manner as the complainant' and St. Louis manufacture?

(Objected to.)

Ans. I could not say.

84. X-int. Would you be willing to testify affirmatively that they were?

(Objected to.)

Ans. I would not.

Redirect by Mr. TOURTELLOTTE, not waiving any rights under objections:

85. R. D. Int. In your examination you are examined in regard to "Complainant's Exhibit W. J. Wilson Patent Deed," on pages 38 and 39 of printed record, which is the assignment of the alledged W. J. Wilson patent deed; that assignment recites that William J. Wilson, John A. Wilson, Daniel A. Loring, and William B. Clapp sold said Wilson Packing Company said patent for one hundred dollars; please state whether you received such a sum of money or any portion of it?

Ans. Not a cent.

(Signed.) WILLIAM B. CLAPP.

Subscribed and sworn to before me this 23' day of Sept., A. D. 1878.

JOHN G. REID,
Notary Public and Special Examiner.

251 Circuit court of the United States of the northern district of Illinois.

THE WILSON PACKING COMPANY AND ARTHUR A. Libby, Archibald McNeil, and Charles P. Libby
vs.
WILLIAM B. CLAPP. } In equity.

Deposition of John Irvine.

Int. What is your name, age, occupation, and place of residence?

Ans. John Irvine. I am about 54 years of age. I am a processor by occupation, and I reside in the city of New York.

Int. In whose employ are you now?

Ans. Kemp, Day & Company's.

Int. How long have you been in their employ?

Ans. About twenty years.

Int. In what business have Kemp, Day & Co. been engaged during that time?

Ans. Canning meats, fruits, jellies, and preserves, poultry and game.

Int. What department of their business have you been engaged in, and in what capacity?

Ans. I have been foreman of the processing department for about eighteen years.

Int. Have you, as such foreman, had full knowledge of the putting up canned meats by Kemp, Day & Co. during that time?

Ans. Yes, sir, and previous to that time.

Int. Where have Kemp, Day & Co. put up meats during the past twenty years?

252 Ans. In Cedar street and in Murray street, New York City.

Int. Are you acquainted with the process of putting up canned meats by Kemp, Day & Co., prior to the spring of 1874?

Ans. Yes, sir.

Int. Will you please describe, in detail, the process of putting up canned meats by said firm prior to that time?

(Objected to.)

Ans. We got the meat, and bone it, and remove all the objectionable parts from it and then can it. We press it in the cans so as to get the proper weight in the cans. Then we put the covers on the cans and soldered them up; afterwards we put them in the bath tub and boil them two hours or more; then we take them out and vent them, and stop them up afterwards, and put them back and cook them sufficient to keep them afterwards.

Int. The process above described by you is the one used by Kemp, Day & Co. for the last twenty years?

(Objected to.)

Ans. It is.

Int. Were the cans in all instances filled full of meat prior to putting on the cover?

(Objected to.)

Ans. Yes, sir.

Int. Were the meats so canned by Kemp, Day & Co. for the last twenty years put upon the market for sale?

(Objected to.)

Ans. Yes, sir.

Int. In what condition would the meat so put up be when taken from the can, in a solid or disintegrated form?

(Objected to.)

Ans. When properly cooled it is generally solid. You can shake it out.

Int. Have you any of the meat now here, put up in the way and manner described by you?

(Objected to.)

Ans. I have, and now produce the same to be marked "Defendant's Exhibit, Kemp & Day Meat."

Int. Is the meat produced by you put up in the same manner as that above described by you for Kemp, Day & Co. for the past twenty years?

(Objected to.)

Ans. Yes, sir.

Cross-examination, de bene, by WILLIAM HENRY CLIFFORD, Esq.:

Int. Then, you have never put up compressed meats, have you?

253 Ans. No, sir, never.

Int. State whether you do, or not, put the meat into the can in a raw state?

Ans. In a raw state, sir.

Int. Your object is simply to fill the can with meat in its natural condition, is it not?

Ans. Yes, and also to retain the substance of the meat in the can.

Int. And if you submitted your raw meat when filling the can to pressure you would be likely to squeeze out the juices, would you not?

Ans. I think not with the pressure we used, the pressure of the hand.

Int. I mean if you used any more pressure than just to fill the can with meat as you do, would you not then be likely to squeeze out the juices?

Ans. If we used any unnecessary pressure, we should; but we can put in the can by hand to get the weight without using unnecessary pressure, and that is the way we do.

(Signed) JOHN IRVINE.

Subscribed and sworn to before me this 11th day of Dec., 1878.

V. S. LILLIE,
Notary Public, Kings County.

(Certificate filed in N. Y. Co.)

Deposition of Henry Lee Borden.

HENRY LEE BORDEN, a witness on behalf of the defendant, taken before me, Jacob C. Turnes, a notary public in and for the county of Cook, in said district, this 16th day of December, A. D. 1878; by agreement of counsel for the respective parties in the above-entitled cause; the parties, complainants and defendant, being present with their respective counsel.

Said Henry Lee Borden, being duly sworn, in answer to interrogatories proposed to him by counsel for defendant, testifies as follows:

1. Int. What is your name, age, place of residence, and occupation?

254 Ans. My name is Henry Lee Borden; my place of residence is Elgin, Illinois; my age is 47 years; my occupation is that of manager of the Illinois Condensed Milk Company.

2. Int. How long have you been engaged in such occupation, and in what occupation were you engaged prior to that time?

Ans. About three years; I was engaged in meat business prior to that, in the State of Texas.

3. Int. How long were you engaged in such meat business?

Ans. Four years.

4. Int. At what place in Texas were you engaged in such meat business?

Ans. In Borden, Colorado County.

5. Int. For what, or with what firm were you engaged?

Ans. For Gale Borden Meat Preserving Company.

6. Int. Who comprised the members of the firm?

Ans. I, Milbank, of New York, and Gale Borden.

7. Int. Were you ever engaged in the meat business, except in Texas, as you have already stated?

Ans. No, sir.

8. Int. In what branch of the meat business were you so engaged in Texas?

Ans. In making roast beef and the extract of beef.

9. Int. Were you not engaged in putting up meats in cans in Texas?

(Objected to.)

Ans. I was.

10. Int. What kinds of meats were you so putting up?

(Objected to.)

Ans. Well, it was called pemican and roast beef.

11. Int. Will you please state the process followed by said firm in the putting up of said meat. Please give the process in detail.

(Objected to.)

Ans. The pemican. The meat for this article was cut up in slices of about one inch thick, placed in pans 12 inches by 2 feet in size, then placed in a rotary oven and roasted until thoroughly done, the meat was then passed through a sausage machine of six-horse power, after which it was pressed into one-pound cans by a four-horse power press; it was then processed in a chemical bath after being sealed.

255 12. Int. State whether you put up meat at that time by any other process than the one last mentioned.

(Objected to.)

Ans. We did.

13. Int. Please state that process, giving it in detail.

(Objected to.)

Ans. The meat was cut in good-sized pieces, cut larger than in the other process, and placed in two-pound cans in the raw condition, sealed and processed in the water and chemical bath.

14. Int. In what condition was such meat when taken from the can—that last described by you?

Ans. In was in a very fine condition. It was very fine meat and condition, but not solid.

15. Int. In what condition was the meat described first by you when taken from the can?

(Objected to.)

Ans. In a solid condition.

16. Int. State whether these two kinds of meat so put up by you were sold on the market at the time it was so put up.

(Objected to.)

Ans. It was.

17. Int. For how long a time and during what years was it so put on the market?

(Objected to.)

Ans. For two years, during 1872 and 1873; we discontinued the business after September, 1874.

18. Int. Have you any of the meat so put up by you in cans as described by your first process?

(Objected to.)

Ans. I don't know but one can, and that was made, I think, in 1871. We did not make a business of it until 1872.

19. Int. Will you present such can to the notary taking this deposition, and mark the same "Defendant's Exhibit Borden's Meat"?

(Objected to.)

Ans. Yes, sir; I will.

20. Int. Will you please state in what condition was said meat so put up by you as stated in your first process when taken out of the can, as to its solidity and as to whether it could be sliced or not?

Ans. Being in round cans, it was removed from the cans with a great deal of difficulty; it had to be dug out; you couldn't get it out any other way.

256 21. Int. Was it sufficiently hard and solid, so that it could be sliced without any difficulty if out of the can?

(Objected to.)

Ans. It was. It could be sliced as nice as cheese.

22. Int. In what markets were such meats sold during said two years?

(Objected to.)

Ans. In the State of New York; New York City.

And in answer to cross-interrogations proposed to him by WM. HENRY CLIFFORD, de bene esse:

1. X-int. Please, if you can, give the time of year or month when you began the two years' putting up of the meat which you have described?

Ans. We commenced in October, 1872; our seasons commenced in October of each year.

2. X-int. Describe as well as you can the degree of fineness which the sausage machine cut the meat, and state if it was in the usual condition as to fineness of sausage meat generally?

Ans. It was a little finer.

3. X-int. I presume that during this process of cutting with this machine some of the juices of the meats flowed out, did they not, while being cut?

Ans. No, sir; the meat did not lose anything going though the machine.

4. X-int. Was or not a considerable portion of the juices lost in the roasting or baking process to chopping or canning?

Ans. I would say that, as my opinion, that it did; that meat baked in an open oven would lose some of its nutriment.

5. X-int. When you pressed the chopped meat into the can, was the whole can top left open; I mean with the cover off?

Ans. It was not; we pressed it in through the stud hole.

6. X-int. How many pounds pressure did you apply to the filling of the meat into the can?

Ans. It was called a four-horse-power machine that done the work, but I couldn't tell how much power was pressed on the meat.

7. X-int. Was the can first filled before the pressure was ap-
257 plied, or did you partially fill and then apply pressure, and so on and so on?

Ans. No, sir; we measured so much into a hopper and pressed it into the can.

8. X-int. Did or not this treatment force some of the juices from the meat; and, if yea, what proportion, as nearly as you can state?

Ans. I think not; the meat was in a pretty dry condition after passing through the sausage machine.

9. X-int. You have stated that the meat could not be got out of your cans except it was dug out?

Ans. Yes, sir.

10. X-int. Then your process did not aim to having the meat come out of the can in a solid cake for use?

Ans. No, sir; we never intended that.

11. X-int. Then the purpose of the compression, of which you have spoken, was to get a given and equal amount in a can?

Ans. It was for that, and we wanted it solid.

12. X-int. You did not intend for it to come out solid?

Ans. No, we did not.

13. X-int. Then what you wanted accomplished by the pressure was merely that it should be solid in the closed can?

Ans. Yes, sir.

14. X-int. You have stated, Mr. Borden, that the meat could be

sliced, but inasmuch as it could not be taken out of the can whole you do not mean to say, do you, that it could practically be used to slice like that of complainants?

Ans. No, sir; I did not; we intended it to be dug out.

15. X-int. By the process of passing the meat through the sausage machine the fibers of the same were chopped and disintegrated, so that the particles in this particular were no longer in their natural condition?

Ans. No, sir; they were not at all in their natural condition.

16. X-int. And you also state that the meat was dryer than in its natural raw or roasted state; in other words, dessic'ated state?

Ans. Yes, sir.

17. X-int. Would or not this finely chopped meat, if taken out
258 of the can whole, have somewhat of a tendency to crumble when the knife was applied, at least somewhat more than *than* the meat prepared by the complainants?

Ans. No, sir; I don't think it would; that is my opinion. I saw it sliced only twice, and then it sliced beautifully. We never intended it for slicing; that was not our object.

18. X-int. Will you explain how you intended the meat should be used?

Ans. We intended it to be used as deviled; ham to be dug out of the can.

19. X-int. As to your packing the roast beef of which you have spoken; in this no compression was used at all?

Ans. No, sir.

X. 19½. Int. Would or not the cooking of the meat in the cans by this process produce a shrinkage in the meat?

Ans. Yes; that does considerable shrinkage of the meat.

X. 20. Int. Then I presume that you processed without venting the cans?

Ans. No, sir; we vented them, but very little—just the least bit in the world.

X. 21. Int. Then you depend upon the heat of the bath to prevent the fermentation which would otherwise be produced by the air in the cans?

Ans. Yes, sir.

X. 22. Int. Did you vent the pemican cans?

Ans. No, sir.

X. 23. Int. Then in the case pemican you relied entirely upon the bath?

Ans. Yes, sir.

24. X-int. In your manufacture of the pemican, then, as you have stated, you did not have the idea of a solid cake of meat to issue in that form—from the can in that form—as the complainant's does?

Ans. No, sir; we did not.

25. X-int. And neither did you have this idea with your roast beef?

Ans. No, sir.

26. X-int. Has the can "Defendant's Exhibit, Borden's Meat," been in your possession since it was put up?

259 Ans. Pretty near. It has been in our family since the time. I got it from an aunt of mine in whose possession it had been until about three weeks ago, when I procured it.

27. X-int. You do not know, then, of your own knowledge, except so far as you have been informed, in whose possession or where this can has been?

Ans. I could almost swear that my aunt had it all the time, as it was in her cellar. I know we made it. I put it up at that time myself, and it hasn't been opened since.

28. X-int. I see by the directions on the label that the unsealed head of the can is made of thinner tin than the other parts, in order that the can may be opened at that end. Was that the case with all your pemican cans?

Ans. Yes, sir.

29. X-int. Then the way you intended to have them opened was to have a disk or circular piece or other form cut out of the thin end?

Ans. Yes, sir.

30. X-int. Will you explain how the words roast beef appear to be on the label of the can of pemican.

Ans. In order to advertise both kinds. We used one label for both kinds.

34. X-int. How can you tell that this is pemican?

Ans. Because roast beef would shake, and that is in a pemican can.

HENRY LEE BORDEN.

Subscribed and sworn to before me this 16th day of December, A. D. 1868.

[L. S.] JACOB C. TURNES,
Notary Public.

260 Circuit court of the United States, the *the* northern district of Illinois.

THE WILSON PACKING COMPANY, ARTHUR A. LIBBY, ARCHIBALD MCNEIL, and CHARLES P. LIBBY
vs.
WILLIAM B. CLAPP.
} In equity.

Testimony on the part of the defendant taken by mutual agreement.

The deposition of William J. Underwood, taken before me, Edwin H. Darling, a notary public in and for the county of Suffolk, on the tenth day of Dec., A. D. 1878, by consent of parties. Complainants' and defendant's solicitors being present at the time and place of taking such deposition, and said witness, before his examination herein, being duly sworn by me to tell the truth, the whole truth, and nothing but the truth.

Deposition of William J. Underwood.

1. Int. What is your name, age, occupation, and place of business?

Ans. William James Underwood; forty-nine years of age; manufacturer and dealer in canned goods; Belmont, Mass.

2. Int. Are you acquainted with the corporation known as the Wilson Packing Company and the firm known as Libby, McNeil & Libby, all doing business in the city of Chicago and State of Illinois?

Ans. Only by reputation.

3. Int. How long have you been engaged in your present occupation?

Ans. I began in 1845.

4. Int. Where have you carried on business since you commenced in 1845?

Ans. In the same building, 67 Broad street, Boston, Mass.

5. Int. Have you been engaged in putting up canned meats during all the time you have been in business?

Ans. Ever since 1846.

261 6. Int. What kind of canned meats have you been putting up during that time?

(Objected to.)

Ans. Beef, mutton, poultry, veal, sausage meat, and all sorts of meats.

7. Int. Did you commence putting up meat in cans when you first went into business in 1846?

Ans. Since 1846 I have been constantly putting up meats.

8. Int. Please state if the meats that you have put up since that time have been on the market for sale.

Ans. They have.

9. Int. Will you please state the process under which you have put up meats ever since you commenced business in 1846? Give it in detail.

(Objected to.)

Ans. When we first began packing in the early days, in packing roast meat a cut of meat was made of the size of the can that was wanted to be filled and roasted before an open fire by being spun around on a twisted thread; for boiled meat the meats were partially boiled and then packed in the can. We filled the cans as full as we could fill them, and afterwards submitted them to the usual process of hermetically sealing, which was by boiling them in the can after they were sealed up, then venting the cans by opening a small hole to let out the air and steam, then closing the vent and again boiling them.

10. Int. Was the same process done with boiled meats as with roast?

Ans. Yes.

11. Int. In what manner was the meat put in cans?

(Objected to.)

Ans. By hand.

12. Int. State whether or not the meats were put in the cans, were packed or pressed solid into them.

(Objected to.)

Ans. As solid as we could possibly get them.

13. Int. What was the condition of the meat so put up by you when taken from the can as to its solidity?

(Objected to.)

Ans. If taken out cold they would be in a solid mass.

14. Int. Have you now any meat put up by you as described?

(Objected to.)

262 Ans. No; we have changed our process. This was the earlier meat I have described.

15. Int. By what other process have you put up meats since you commenced business than the one described by you in your answer to former question?

(Objected to.)

Ans. By putting the meats raw into the cans, and then subjecting them to the same after process, and also under a patent process of our own, in which we use a chemical bath and a lozenge of sulphite of soda.

16. Int. When did you commence putting up meat under the process last described?

(Objected to.)

Ans. I think it was in 1862. This was an antedated patent.

17. Int. How long did you continue to put up meats under the patent process?

(Objected to.)

Ans. We pack them now.

18. Int. Have you put up meats under any other process except the two last mentioned?

(Objected to.)

Ans. No; no other process but these two.

19. Int. Have your meats which you have put up by this last-mentioned process been on the market for sale since you first commenced putting them up?

(Objected to.)

Ans. They have.

20. Int. Have you any of the meats so put up by you in your business now? Will you please produce a can of the same?

(Objected to.)

Ans. I have. I do, and it is marked "Exhibit Underwood's Beef"—defendant E. H. D., examiner, Boston, December 10th, 1878.

21. Int. Is this meat that you had produced put up under this last-mentioned patent process?

(Objected to.)

Ans. It is.

22. Int. When was this meat mentioned under this process put up—in what year?

Ans. I can't tell; it is more than a year old.

23. Int. What kind of meat, aside from beef, was so put up by you under this last patent process?

(Objected to.)

263 Ans. All the various kinds mentioned by me before.

24. Int. Have you always put up this meat in the same kind of can shown in the exhibit?

(Objected to.)

Ans. In similar cans of different size.

25. Int. In what way do you pack the meat; in cans similar to the one now exhibited?

(Objected to.)

Ans. The necessary amount of meat to fill a can is cut off and weighed. The cans are so made that that amount will just fill them, and then the meat is pressed into the can in the best manner to get it in.

26. Int. Is the meat in a cooked or raw state when pressed into the can?

(Objected to.)

Ans. Most of them in a raw state, but poultry and some other kinds in a cooked state.

27. Int. Will you please attach a copy of the patent under which you put up this meat to your deposition, and mark it "Exhibit Underwood's Patent B?"

(Objected to.)

Ans. I do.

28. Int. Have you put up meat under any other process than those heretofore described?

(Objected to.)

Ans. No.

29. Int. Please state if, in packing meats as you have described since

1862, you do or do not remove the bone and all substances except the meat or fat before it is placed in the can.

(Objected to.)

Ans. I do, with the exception of the smaller bones of the poultry.

Cross-examination by WILLIAM HENRY CLIFFORD, counsel for the complainants:

1. X-int. In the process which you have pursued, is or not the meat introduced into the can when the whole top thereof is open?

Ans. In some cans it is, and in some not. When we want to have preserved meat come out as nearly as possible in one piece, or when we want to place the meat particularly in an unbroken state in the cans, we use an open-top can; otherwise a stud-top can answers the purpose.

264 2. X-int. Then, when you desire the meat to come as nearly as possible in a whole state, you put it into the can in a whole piece, and through the open-top can, do you not?

Ans. Yes.

3. X-int. Upon what do you rely for the expulsion of the air from the can; is it or not the venting and purging, as you have described?

Ans. Venting the can.

4. X-int. Do you in your practice such as you have described rely upon any other method for the expulsion of the air?

Ans. No.

5. X-int. Do or not your answers as to the introduction of the meat into the can, and the exhaustion of the air, apply to the Exhibit Underwood's Meat?

Ans. It does—subject to the peculiar process of my patent.

6. X-int. I notice in the open can of meat similar to the Exhibit Underwood's Meats that there is a portion of the exterior of the can filled with a cooled fat; what is the occasion of that?

Ans. It is the fat of the meat; that will occur more or less in the can, according as there is more or less fat in the meat that is packed.

7. X-int. In the introduction of this meat into the can, is it or not the object of this method of packing to have the single piece of meat as nearly as possible fill the can?

Ans. It is for those goods the trade require in that way.

8. X-int. Is i or not the case in "Exhibit Underwood's Beef?"

Ans. It is.

9. X-int. I notice in the opened can similar to the "Exhibit Underwood's Beef" that there is a portion of the can at the top not filled with the meat; will you state what occasioned this, and whether, as it now appears, it is as full as the cans usually are of this kind?

Ans. It is occasioned by the evaporation of the juices of the meat in the first part of the process of bathing—that is a fair sample of the beef as it turns out under our patent process.

10. X-int. Will you please state whether, when the meat is first placed in the can, it does not equally fill the can?

265 Ans. It fills it so full that we have hard work to get it in sometimes.

11. X-int. Is or not the meat in the can of the natural density or solidity of cooked beef, roasted or boiled?

Ans. I should say that it is more dense than boiled beef and less dense than roast beef, although I may be mistaken.

12. X-int. Then, being of such density as you have described, there has not been, has there, any mechanical force applied to compact the

fibres upon themselves to any degree of density above the natural ones of roast beef?

Ans. No force except putting the meat into the can to start with. Any force applied to raw meat, of great power, would drive out the juices of the meat, which we wish to retain.

14. X-int. The application of pressure to the meat as you pack it in the form of Exhibit Underwood's Beef would injure the quality by forcing out the juices, would it not?

Ans. If pressure was applied to a greater extent than enough to fill the can full, it would.

14. X-int. Have you, in this method seen in Exhibit Underwood's Beef, ever used any more compression than the packer executes with his hand to fill the can with the piece of meat, as you have stated?

Ans. The packer, with the pressure of his thumb upon the meat, takes the can and strikes the lower end of it upon the bench to settle the meat within the can as solid as possible. That is all I have done.

15. X-int. The object of this operation which you have described in the last answer is to fill the can with the meat, is it not?

Ans. Yes.

16. X-int. And the filling of the can in this manner is to obtain the required weight of meat in the can, is it not?

Ans. Of course.

17. X-int. Suppose the juices or fat as seen in the opened can like Exhibit Underwood's Beef were melted, in what condition would the contents issue from the can with the head taken off?

Ans. Like a piece of roast meat with the gravy on it.

(Signed) W. J. UNDERWOOD.

266 I, Edwin H. Darling, a notary public in and for the county of Suffolk and Commonwealth of Massachusetts, do hereby certify that William J. Underwood, whose deposition is above given, appeared before me at the date aforesaid, and was duly sworn by me, and his deposition reduced to writing by me, complainants' and defendant's solicitors both being present, and that the within deposition was signed by said William J. Underwood and sworn to as his deposition.

Witness my hand and official seal, at Boston aforesaid, the tenth day of December, A. D. 1878.

[L. S.] EDWIN H. DARLING,
Notary Public, Suffolk County.

Magistrate's fee, $20.00. E. H. D.

Exhibit Underwood's Patent "B."

The schedule referred to in these letters patent and making a part of the same.

To all whom it may concern:

Be it known that John McCall, of Houndsditch, in the city of London, England, provision merchant, and Bevan George Sloper, of Walthamstow, in the county of Essex, England, chemist, have invented an improvement in the preservation of articles of food, and we do hereby declare that the following is a full and exact description thereof. In the preservation of meat and other articles of food it is usual to subject them in tins to heat, in order to drive off air and oxygen contained in the vessels and in the meat or other articles of food themselves. For this purpose an aperture is made in the tins, through which a portion

of the air and oxygen is driven off, and in order to decompose the remaining portion of the air it has been necessary to use such an
267 elevated temperature, or to apply heat for so long a time as to injuriously affect the meat and food. Our invention consists in introducing into the tins some material or composition for which oxygen has a greater affinity than for the meat or other articles of food under preservation, and which at the same time shall be in no way detrimental to it. We have found in practice that sulphite of soda is the best agent for our purpose, but we do not confine ourselves to the use of that substance only. We prefer to encase or cover the sulphite of soda, or other suitable materials or composition as aforesaid, in gelatine or other suitable protecting coat, to prevent it coming into action before the coat has been dissolved by the heat to which the tin and contents are first subjected, and the time of its solution we vary according to circumstances. About the time we have calculated for its solution we hermetically seal the tin, and then for a short period apply a higher degree of heat, when the oxygen remaining in the tin and in the meat or other food will combine with the sulphite of soda, or other suitable material or composition as aforesaid, in gelatine. We sometimes place it in a tin, or other suitable metal case, having holes or perforations first made therein, and then closed by a metal which will become fused on being exposed to the higher degree of heat hereinbefore mentioned after the outer tin case has been hermetically closed.

What we claim as our invention and desire to secure by letters patent is the within-described process of preserving articles of food by the introduction of sulphite of soda, or its equivalent, into the cans in which the articles are preserved, in the manner and for the purpose herein described.

JOHN McCALL.
B. G. SLOPER.

Witnesses:
J. C. NEWBURN, 116 *Fleet st., London,*
J. B. WYNN, 24 *Royal Exchange* "

Exhibit Underwood's Patent "B." E. H. D., examiner, Dec. 10, 1678.

268 *Jules de Lignac patent.*

* * * for "an improved mode of preserving animal substances," upon the conditions (amongst others) that I, the said Jules Jean Baptiste Sylvian Martin de Lignac, by an instrument in writing under my hand and seal, should particularly describe and ascertain the nature of the said invention, and in what manner the same to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said letters patent.

Now, know ye that I, the said Jules Jean Baptiste Sylvian Martin de Lignac, do hereby declare the nature of my said invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, that is to say:

The process hitherto employed for the purpose of preserving animal substances by the desiccation and concentration of the same present the serious inconvenience of hardening the muscular fibre to such an extent as to render its ulterior hydration very difficult, and to render the diverse products obtained by such modes of treatment tough and disagreeable to eat. The object of the present invention of an improved mode of preserving animal substances is to effect the desiccation of the raw meat merely to such a point that it may still retain a sufficient

quantity of aqueous juices to admit of its being prepared for food without imparting to it that toughness and disagreeable taste hitherto so objectionable in desiccated meats.

The preservation of animal substances is thereby effected, and at the same time the volume of the products is reduced, by compressing it in boxes made sufficiently strong to resist the strain to which they would be submitted. It is preferable to make these boxes of cylindrical form, and when the substance is placed therein they should be immediately closed and submitted to such a temperature as will prevent ulterior spontaneous change or deterioration.

In order to prepare the animal substances for enclosure in the cases above mentioned, the raw meat is first to be cut into cubes of about an inch square, and subjected, in stoves or hot-air chambers, to a
269 current of air heated to a temperature of from twenty-five degrees to thirty degrees centigrade, until, by the continuous and energetic action of this current of hot air, the meat has lost about fifty per cent. of its weight. It is to be then powerfully compressed in cylindrical tin boxes in such a manner that a vessel capable of holding about a quart shall receive eight rations, the whole (vessel, liquor, and meat) weighing from two pounds to two pounds and a half, and representing five pounds of fresh meat. The operation is concluded by filling with concentrated liquor any spaces left in the box by the meat which has been compressed therein. The cover is then to be soldered on, and the box and its contents are submitted, in a cooking vessel (or digester), to a temperature sufficiently high to produce steam in the box. It will be understood that by this cooking-operation in a close vessel the water remaining in the meat will be partially converted into steam, and will expand the tissues and render them fit for the ulterior absorption of the water when immersed therein, causing them readily to assume their original volume and to be more promptly acted upon by the subsequent cooking operation. Meat thus compressed and preserved may either be consumed directly on being taken from the air-tight box or it may be immersed in cold water and made to boil, thereby producing excellent broth or soup and good boiled meat.

The dimensions of the boxes and their cylindrical form will allow of their being placed upon the soldier's knapsack, and the provisioning of troops may be thereby greatly facilitated, as such soldiers will be able to carry eight days' rations. It will be seen that this process differs materially from the plans formerly in use, inasmuch as according to the present improved system the meat loses about fifty per cent. of its weight, or about two-thirds of the water which it contained before being compressed in the boxes, moreover, it is placed and compressed therein in the raw state and may be finally cooked therein in a close vessel, and will the better preserve its aroma and juices unadulterated. Besides the above advantages, this process offers an economy of fifty per cent. in the cost of the tin boxes and fifty per cent. in packing and transport.

Having now described my improved mode of preserving animal substances and the manner of carrying the same into effect, I claim
270 as of my invention submitting animal substances to the action of a current of water or heated air, whereby a certain portion of the aqueous or watery particles may be carried off, and then compressing the partially dried meats in boxes or vessels of suitable size and shape, so that the bulk or volume of the animal matters may be reduced, and subsequently submitting the compressed meats to the action of heat, whereby steam may be generated in the boxes, and the vesicles

or pores of the meat be thereby opened to such an extent as will greatly facilitate the subsequent cooking of the meats, as above explained.

In witness whereof I, the said Jules Jean Babtiste Sylvian Martin de Lignac, have hereunto set my hand and seal the twenty-first day of April, in the year of our Lord one thousand eight hundred and fifty-six.

J. J. B. S. MARTIN DE LIGNAC. [L. S.]

Esc'd. Witness:
C. C. W. A. PERPIGNA.

Copy of the Durand patent.

A. D. 1810. No. 3372.

Preserving animal and vegetable food.

To all to whom these presents shall come, I, Peter Durand, of Huxton Square, in the county of Middlesex, merchant, send greeting:

Whereas His Most Excellent Majesty King George the Third did, by his letters patent under the great seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the twenty-fifth day of August, in the fifteenth year of his reign, give and grant unto me, the said Peter Durand, my executors, administrators, and assigns, his special license, full power, sole privilege, and authority that I, the said Peter Durand, my executors, administrators, and assigns, during the term therein mentioned, should, and lawfully might, make, use, exercise, and vend, within England, Wales, and the town of Berwick upon
271 Tweed, an invention communicated to him by a certain foreigner residing abroad of the method of "preserving animal food, vegetable food, and other perishable articles a long time from perishing or becoming useless;" in which said letters patent there is contained a proviso obliging me, the said Peter Durand, by an instrument in writing under my hand and seal, to cause a particular description of the nature of the said invention, and in what manner the same is to be performed, to be enrolled in His Majesty's high court of chancery within six calendar months after the date of the said recited letters patent, as in and by the same, relation being thereunto had, may more fully and at large appear:

Now, know ye that in compliance with the said proviso, I, the said Peter Durand, do hereby declare that the nature of the said invention, and the manner in which the same is to be performed, are particularly described and ascertained as follows, that is to say:

First. I place and inclose the said food or articles in bottles or other vessels of glass, pottery, tin, or other metals or fit materials, and I do close the aperture of such containing vessels so as completely to cut off and exclude all communication with the external air; and as to the method of closing, I do avail myself of the usual means of corking, airing, luting, or cementing; and in large vessels I make use of corks formed of pieces glued together in such a manner as that the pores of that substance shall be in a cross-direction with regard to the aperture into which such corks are to be driven; and I do also, in such vessels as may admit of or require the same, make use of toppers fitted or ground with emery, or screw-caps with or without a ring of leather or other soft substance between the faces of closure, and also of cocks or cross-plugs, or covers of leather, cloth, parchment, bladder, and the like.

Secondly. When the vessels have been thus charged and well closed,

I do place them in a boiler, each separately surrounded with straw or wrapped in coarse cloth, or otherwise defended from striking against each other; and I fill the said boiler so as to cover the vessels with cold water, which I gradually heat to boiling, and continue the ebullition for a certain time, which must depend upon the nature of
272 the substances included in the vessels and the size of the said vessels and other obvious circumstances which will be easily apprehended by the operator without further instructions. Vegetable substances are to be put into the vessel in the raw or crude state, and animal substances partly or half cooked, although these may also be put in raw. The food or other articles thus prepared may be kept for a very long time in a state fit for use, care being taken that the vessel shall not be opened until their said contents shall be wanted for consumption.

And, lastly, I do declare that although the application of the water-bath, as hereinbefore described, may be the most commodious and convenient, I do likewise avail myself of the application of heat by placing the said vessel in an oven or a stove or a steam-bath, or any other fit situation for gradually and uniformly raising the temperature of the same and suffering them to cool again; and, further, that I do, as the choice of the consumer or the nature of the said food or other articles may render preferable, leave the aperture of the vessel, or a small portion thereof, open until the effect of the heat shall have taken place, at which period I close the same.

In witness whereof I, the said Peter Durand, have hereunto set my hand and seal the thirtieth day of August, in the year of our Lord one thousand eight hundred and ten.

PETER DURAND. [L. S.]

Copy of the Gunter patent.

A. D. 1841. No. 8776.

Preserving animal and vegetable substances.

To all to whom these presents shall come, I, Henry Gunter, of Cullum street, Fenchurch street, in the city of London, merchant, send greeting:

Whereas Her present Most Excellent Majesty Queen Victoria, by her letters patent under the great seal of Great Britain, bearing date at Westminster, the sixth day of January, in the fourth year of her
273 reign, did, for herself, her heirs, and successors, give and grant unto me, the said Henry Gunter, her especial license, full power, sole privilege, and authority that I, the said Henry Gunter, my executors, administrators, or assigns, and such others as I, the said Henry Gunter, my executors, administrators, or assigns, should at any time agree with, and no others, from time to time, and at all times during the term of years therein expressed, should, and lawfully might, make, use, exercise, and vend, within all her said Majesty's colonies and plantations abroad, my invention of "improvements in preserving animal and vegetable substances;" in which said letters patent is contained a proviso that I, the said Henry Gunter, shall cause a particular description of the nature of my said invention, and in what manner the same is to be performed, to be enrolled in her said Majesty's high court of chancery within six calendar months next and immediately after the date of the said in part recited letters patent, as in and by the same, reference being thereunto had, will more fully and at large appear:

Now, know ye that, in compliance with the said proviso, I, the said Henry Gunter, do hereby declare that the *the* nature of my invention and the manner in which the same is to be performed are fully described and ascertained in and by the following statement thereof, that is to say:

My invention relates to a mode of treating animal and vegetable substances in cases or vessels by heat, and thus cooking or partially cooking the same, and driving off the atmospheric air contained therein, whereby the animal and vegetable substances so treated may be preserved for a length of time in a fresh and pure state, and retain their natural flavor. And in order to give the best information in my power, I will proceed to describe the process as pursued by me. I employ, by preference, vessels or cases of tin, and of cylindrical or other convenient form, such vessels each having one end fixed therein, and into these vessels I place such animal substances as I may desire to preserve, having first scalded them. I then solder on the other end of each vessel, so that the vessel will be hermetically closed, having in filling allowed a small quantity of room in each vessel to permit the substance therein to swell: I then place a number of such vessels into a large boiler and cover them with water, and close the boiler and cause the water therein to boil freely, but retaining it about two
274 hundred and twelve degrees of Fahrenheit, and continue such boiling for about two hours and a half for animal matter, and from fifteen to twenty-five minutes for vegetable matter. I then take out such vessels, and on examination, if they show no unsoundness, I place them in a hot sand-bath or other convenient means of applying heat, so as to leave the upper end uncovered, and I puncture therein a minute hole, and heat being kept up to insure its being above two hundred and twelve degrees of Fahrenheit, the air in the case or vessel will be driven out with the steam; and when it is seen that the steam is coming very freely, I close the minute hole by soldering iron whilst the steam is still flowing off, and in opposition thereto. The process will then be complete. And it may be remarked that by pursuing this process great advantages will be derived, as it will be evident that by causing the process of heat to be carried on during the time the vessel is hermetically closed all the flavor of the substances treated will be retained, and the vessels will only be opened so long as simply to allow of the air being driven off, from which circumstance the animal and vegetable substances will be preserved in the most advantageous manner.

And, in conclusion, I may remark that, although I have been thus particular in describing the exact means pursued by me, I do not confine myself thereto, so long as the mode herein described be retained; and I am aware that animal and vegetable matters may be preserved by simply placing them in such vessels as herein described and closing them therein, but in place of having them hermetically sealed when undergoing the process of heat to cook or partially cook the same, to have a minute hole or holes in the cover, and allow the vapors to flow off during the whole time of applying heat, and then closing such vessels when the substances are cooked to the extent desired; but I do not consider such process nearly so advantageous as that above described, as much of the flavor of the animal or vegetable substance or substances by the latter means would be driven off, whereas in *in* the former processes the same are retained, as the cooking goes on during the time the vessel is hermetically sealed.

n witness whereof I, the said Henry Gunter, have hereunto set my

hand and *and* seal, this thirteenth day of January, in the year of our Lord one thousand eight hundred and forty-one.

HENRY GUNTER. [L. S.]

275 United States circuit court.

WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
vs.
WILLIAM B. CLAPP. } In equity.

EXHIBITS TO DEPOSITION OF W. ARCHDEACON.

Deposition of W. Archdeacon in suit Wilson Packing Company vs. Crystal Lake Pickling and Preserving Works et al.—(See page 23, defendant's record.)

Q. 1. State your name, age, residence and occupation.

A. William Archdeacon; my residence at present is Oak Park, Cook County, Ill.; age, fifty-three years; my occupation at present is manufacturer's agent.

Q. 2. Do you know the defendant "The Crystal Lake Pickling and Preserving Works," and are you one of the defendants in this suit?

A. I know the company, and am one of the defendants.

Q. 3. What connection do you or did you have with the Crystal Lake Works?

276 A. I was president of the company, and had charge of their works.

Q. 4. Have you, since the sixth (6th) day of April, 1875, manufactured or put up, on your own account, any prepared or preserved meats of any kind?

A. No, sir.

Q. 5. Please state what kinds of meat were manufactured or prepared by the Crystal Lake Works. In your answer please state the process or processes used by said works in manufacturing the various kinds of meats put up by it, and particularly as to the process used in manufacturing corned beef for the market, since the sixth of April, 1875.

A. We packed but very little of anything during that time in the meat line, and the most of any one kind we did manufacture was corned beef. The process of packing corned beef is as follows: The beef is salted in brine in the ordinary manner. The beef was then taken out of the brine and washed, put into a steam-kettle, and a portion of pig's feet put with it. My recollection of the proportion is one pig's foot to ten pounds of beef. This depends somewhat on the size of the pig's feet. The kettle was covered as nearly steam-tight as possible, tightly covered, and boiled in that way until the bones could readily be taken from the meat. The meat was then taken out on a table, and the bones taken from them. The marrow, if any was left in the bones, was returned to the kettle with the gravy. The gravy was then boiled down to a suitable thickness. The meat was cut up in small pieces by means of a knife or knives, say an inch or less in size. The empty can was taken and a little of the gravy put in the can first, then some of the small pieces of beef put in, and then a little more gravy, and so on till the can was full. Then the meat was pressed down with the fingers,

to be sure that the meat was solidly in, and the gravy evenly mixed. The cans was then put into a water-bath and made thoroughly hot.
277 They were then soldered up air-tight and put into a chemical bath, where the temperature would be brought up to somewhere between 212° and 270°—I forget the exact heat. They were kept in the chemical bath for a certain number of hours. They were then taken out and put in cold water, and that finished the process.

Q. 6. Were there any cans of preserved meat manufactured or put up by said works by any other or different process than that you have just described since the 6th day of April, 1875?

A. Not that I know of.

Q. 7. When was the company or works organized, and when did it commence operations?

A. February, 1875.

Q. 8. How long have you been engaged in or connected with the manufacturing of various kinds of canned meats?

A. Since about 1861.

Q. 9. What process or processes were in use for canning meat at the time you commenced?

A. The process used by me at the time I commenced was similar to the one I described in corned beef, with the exception of using the chemical process in boiling. At that time I used water, and steam, without chemicals. I would say here that different materials require different processes; therefore, it depends a great deal on the material used as to the process used.

Q. 10. When you used water and steam in place of the chemical bath did you use it for the same or for a different purpose than that for which the chemical bath was used by the Crystal Lake Works?

A. It took the place of that. The chemical bath is used to shorten the time of the process.

Cross-examination by JOHN W. MUNDAY, Esq.:

X Q. 1. Is the Crystal Lake Pickling and Preserving Works a bankrupt?

278 A. If not being able to pay their debts, they are.

X Q. 2. Is the late president of that company also a bankrupt?

A. He is.

X Q. 3. Had you a store in Chicago last year?

A. I had.

X Q. 4. Did you ever sell any canned meat there?

A. I did; a very little; I don't remember any instance, only we sold some to Mr. Wilson, so that he could commence this suit, and gave him a bill and receipt for it.

X Q. 5. Are these Exhibits C like what you sold him?

A. From every appearance, they are.

X-int. 6. Have you put up any game or poultry at the Crystal Lake Works since April, 1875?

A. No, sir; not that I know of; yet we may have put up small orders.

X Q. 7. How thick did you boil this gravy?

A. Thick enough to make it a solid jelly when cold.

X Q. 8. You put the meat into the can with your fingers, didn't you?

A. Yes, sir.

X Q. 9. You put it in through the hole in the base of the can, which is covered in Exhibit C by a cap?

A. Yes.

X Q. 10. Did you ever have any difficulty with the edges of the hole cutting the fingers?

A. No; I never heard of anything of that kind. The girls may have had such trouble, but I never heard of it at the time.

X Q. 11. They never used any sticks to poke the meat into the can, or spread it around in the can, or for any other purpose?

A. Not that I know of.

X Q. 12. Did you ever see them filling these cans?

A. Yes, sir; frequently.

279 X Q. 13. How many girls were employed at this work?

A. As near as I can recollect, from five to ten.

X Q. 14. And you never heard of or saw, during your frequent observations, any one of these five or ten girls using a stick to assist in placing the meat in the can, or adjusting it after it was in?

A. No, sir.

X Q. 15. What was the temperature of the first bath—the one employed before the cans were soldered up?

A. About 212°—boiling heat.

X Q. 16. The purpose of this bath was to effect the hermetical sealing of the can, was it not, and to expel the air?

A. Yes; I suppose so.

X Q. 17. About how much gravy was put into a can, Mr. Archdeacon, along with the meat?

A. I never measured it, but I should suppose that it would be about one-fifth gravy, as near as I can estimate.

X Q. 18. Then the can was filled up full of meat, was it not, so that it could be pressed with the fingers, as you state in your direct examination?

A. The can was filled up with meat and gravy, allowing room to solder the cap on properly.

WM. ARCHDEACON.

Subscribed and sworn to before me this 25th day of May, A. D. 1876.

O. W. BOND,
Special Examiner.

280 *Exhibit Affidavit of W. Archdeacon.*—(See page 23, defendant's record.)

[Title and venue.]

WILLIAM ARCHDEACON, being duly sworn, doth depose and say that he is a resident of Oak Park, in the county of Cook and State of Illinois, and that he has so resided in said county and State about twenty years; that he has been in the canning, packing, and preserving business for about twenty years; that he has been in the business of canning meat for about nine years last past; that in the year 1869 he commenced to experiment in putting up cooked meats in cans at Chicago, Illinois; that in the years 1870 and 1871 he commenced to put up cooked meats in cans for the market and for sale; that in said year he put up in tin cans, hermetically sealed, cooked corn beef, in the city of Chicago, Illinois; that the process of putting up said meat was as follows: The meat was cut from the larger bones and then boiled, and then the smaller bones were removed; the meat was then compressed into tin cans so that the same would be solid and the can full; that the same was pushed or crowded into said cans as hard as could reasonably be done; that the said meat was put up without any moisture or water, so that when

taken out of said cans the same would be solid and could be cut with a knife; that after the meat was so put into cans the top was then soldered on; the can then boiled in hot water, a vent made in the can, and the air allowed to escape, and then the vent soldered up; that there was an offset at both ends of the can, and a shield under the place where the vent was made, so as to prevent the meat from obstructing the escape of the air; that this deponent has seen the cans put up by the complainants, and knows the kind and construction of the cans and the nature of the meat put up in them; that the meat so put up by him as aforesaid is similar in all respects to that put up by the complainants, both as to the general construction of the can and the mode and manner of putting up the meat and the condition of
281 the meat when put up (except the shape of the can). That this deponent put up in the years 1871 and 1872 various kinds of cooked meat besides beef, in cans, in a similar manner as they put up said beef. That this deponent put various kinds of cooked meat, such as mutton, veal, sausage, and beef, in the year 1873, and sent the same to the Vienna Exposition in Austria, and received from the officers of said exposition a medal for said cooked meat; that said meats so put up were put up in manner aforesaid. And this deponent says that, when he so packed the said cooked beef and meats so sent to the Vienna Exposition, the same were packed or compressed into said cans with a pestle or stick. And this deponent says that about about the year 1875, and while he was engaged in putting up said meat as aforesaid, the said Wilson Packing Company commenced a suit against him and others for infringing the patent mentioned in the complainants' bill as issued to the said Wilson in the United States circuit court for the northern district of Illinois. That he at once employed West & Bond as his attorneys in said suit and prepared for his defense in said suit. That he filed his answer, and the case was fully prepared for taking testimony, and testimony was taken on the part of this deponent which fully showed that meat had been put up in a similar manner to that by the complainants for many years prior to the issuing of the said patents issued to the said complainants. That the most material testimony taken by this deponent in his suit was taken after he went into bankruptcy. That no injunction was ever obtained in said suit, nor was any asked except as mentioned in the bill filed therein. That this deponent understood that the said Wilson Packing Company commenced said suit against him to test the validity of his patents mentioned in the above-entitled suit. That after taking the testimony on the part of this deponent in said suit, and the matter remaining in that condition some time, when, on seeing Mr. Tolman, he was informed that the said complainants had dismissed the suit; and this deponent
282 on making further inquiry, learned that the said complainants had dismissed their said suit. And this deponent says that the can and meat accompanying this affidavit is a can of meat put up by him in the year 1874, marked "Archdeacon's Exhibit A."

(Signed) WILLIAM ARCHDEACON.

Subscribed and sworn to before me this 15th day of January, A. D. 1878.

JACOB C. TURNER,
Notary Public.

Exhibit Deposition of W. H. Railton—(See page 24, defendant's record.)

Q. 1. State your name, age, residence, and occupation?

A. William H. Railton; age, 26 years; residence, 887 West Wash-

ington street, Chicago, Illinois. I am not doing anything just now. I have been manager for the Crystal Lake Pickling and Preserving Works.

Q. 2. How long were you in the employ of that company, and what particular branch of the business, if any, came under your supervision or charge?

A. Ever since the company commenced. The manufacturing I had full charge of.

Q. 3. Was any portion of the company's business that of canning and preserving meats?

A. Yes, sir.

Q. 4. Please state fully the process used by you for the company, or by the company, under your supervision, for that purpose.

A. Well, we take the meat and put it into the boilers, and boil it thoroughly, until we can take a knife and get it off the bone; then we cut it up in smaller pieces and put it into the cans, in a gravy.

283 We take and put in a little gravy, and then a little meat, and so on until we get the can full. We afterwards put it in a steam-bath, with the hole open; then we take it out and take a damp sponge, dampened in cold water, and wash the top of the can clean, and stop the steam from rising, and then solder it up while the can is boiling hot. We then bathe the cans in a chemical solution; we leave them in there for a certain length of time, and then take them out and set them where they will cool off—get cold. We do this to harden this gravy that we make—to harden and set it. That is the operation.

Q. 2. What pressure, if any, do you apply to your meat, either in preparing it for canning or in placing it in the cans?

A. We use no pressure.

Q. 6. In your second boiling, in what you have termed your chemical solution, how high, or at what temperature, did you boil the meat?

A. We used a temperature from 270° down to 212°.

Q. 7. What effect does this second boiling have upon the gravy placed in the can with the meat?

A. It has a tendency to work this gravy all through and into the meat, so as to make it hard when cooled off.

Q. 8. Where did you learn the business of packing meats, or from what source did you obtain this process you have used for the company?

A. Well, principally from receipt-books, and from Mr. Archdeacon.

Q. 9. Please look at the article "Preservation of Food," commencing on page 568, of volume 13, of the New American Cyclopedia, now shown you, and particularly at that portion of said article which is on page 569, commencing with the words: "Fermentation is checked by boiling," to the end of the article, and say in what respect, if any, the process used by the Crystal Lake Pickling and Preserving Works differs from the process there described.

(Objected as calculated to lead the witness.)

A. It is the same.

284 Q. 10. By that you mean that the process described in the article referred to in the last question is the same as that used by the Crystal Lake Pickling and Preserving Works?

A. Yes, sir.

(By consent of counsel, so much of the article as is referred to in the question is here copied, and is as follows:

"Fermentation is checked by boiling, and the air being then excluded, the article may still be preserved. On this principle the most

efficient plans of preserving food in their original condition are founded. M. Appert received, in 1810, from the French Government, 12,000 francs for introducing his process of parboiling provisions and then confining them in air-tight jars. His method was perfected by Donkin & Co., and Gamble, of London, and as thus improved is in common use. It has proved of immense importance for navy and army supplies, and is especially available for furnishing fresh meats on long voyages. Elementary substances of almost any kind are cooked in the usual way. From meats the bones are removed, and they are then put in tin canisters, with or without vegetables, and the canister is immediately filled quite full with rich gravy. A cover with a small hole in it is then fitted on, and the vessel is set in boiling water, or in a hotter saline solution. The heat expels all the air that may be in the canister, and steam also issues through the little aperture. This is checked by the application of a damp sponge, when the hole is instantly stopped by solder, and it is exposed again to a boiling temperature. As the contents cool they contract, and the covering is bent in a little by the external pressure of the air. If afterward, on being exposed to a temperature of 100° F., putrefaction does not take place and burst the canister, no free oxygen is present, and there is no risk of the contents spoiling in any climate, for any length of time. By a later improvement, air is partially exhausted from the canister while it is standing in hot water, and it is then immediately closed. Cans and bot-
285 tles are now provided and largely used for preserving fruits, having metallic covers that screw tightly down, and the joint is made still more secure by the application of wax. The fruits are preserved either with or without sugar, and if without, a gill of water is introduced into the can for every quart of fruit. In every case the can is set into boiling water for fifteen or thirty minutes, then the cover is tightly screwed down, and after this for about half as long. The second boiling is designed to convert any oxygen that may possibly remain in the can into carbonic acid. In Texas a very nutritive and portable food called meat biscuit has been prepared by mixing strong meat broth with flour and baking. This may be cheaply produced in large quantities wherever cattle are destroyed for the sake of their skins only. Methods of preserving milk and butter are given in the articles on those subjects.")

Q. 11. Please look at the meat now before you, said meat being the contents of the can Complainants' Exhibit A, and say whether or not that meat was prepared and canned by the process described by you in your answer to interrogatory 4.

A. Yes, sir; it was.

Q. 12. Are you able to find any of the gravy used in that process still in the meat; and, if so, state in what condition you find it?

A. Yes, sir; I find it in the form of a gelatine.

Q. 13. Please say whether or not any pressure was applied to that meat in packing.

A. No, sir; there was not.

Q. 14. Please look at the can Complainants' Exhibit A, and particularly at the detached head or larger end, and say whether or not you find in that the hole used in the steam-bath, and the solder by which the can was finally closed.

A. Yes, sir, I do; I find it in the center of the large head of the can.

286 Cross-examination by JOHN W. MUNDAY, Esq.:

X Q. 1. You say you learned this method of putting up meat

partly from receipt-books and partly from Mr. Archdeacon; what Archdeacon do you refer to?

A. William Archdeacon, the president of the Crystal Lake Pickling and Preserving Works.

X Q. 2. Does his name appear upon this can, upon the label thereof?

A. Yes, sir.

X Q. 3. Do you know Mr. F. A. Waidner, whose name also appears upon the label?

A. Yes, sir.

X Q. 4. Do you know what connection Mr. Waidner has with the Crystal Lake Pickling and Preserving Works?

A. Not any, I think; any more than agent for selling their goods.

X Q. 5. How do you get the meat in the can in the process which you employed in preparing that meat similar to Exhibit A?

A. By hand.

X Q. 6. What condition was the can in when the meat was put into it?

A. The can was empty.

X Q. 7. Was the meat put into the empty can through a hole in the large head, which appears to have been closed by soldering a disk about two inches in diameter over it?

A. It was.

X Q. 8. Was no other contrivance or instrument used in putting that meat through that hole into the empty can except the hand?

A. There was not.

X Q. 9. Are not the rough edges of the tin liable to cut the fingers of the operator in filling such a can as this?

287 A. No, sir; I think not if they handle it carefully.

X Q. 10. There was never, in the Crystal Lake Pickling and Preserving Works, any of this meat put up by the use of a stick for putting the meat into the can, was there?

A. No, sir.

X Q. 11. What proportion does the amount of gravy bear to the amount of meat, under ordinary circumstances, in the process you have described as being by the Crystal Lake Works, and especially what proportion does the gravy bear to the meat in Exhibit A, if you can tell?

A. That proportion that we can conveniently put in.

X Q. 12. About how much gravy is put in?

A. I never measured it, and cannot tell.

X Q. 13. Have you no opinion or judgment upon that point?

A. No better than I gave you, that we put in all we could conveniently get into the can.

By Mr. BOND:

Did you put in enough to fill it?

A. Why, yes, of course; we put in enough to fill it, and until it run out at the top.

X Q. 14. How much gravy do you suppose is in that meat of Exhibit A?

A. Enough to hold the meat together.

X Q. 15. How much is that in quantity about?

A. It is very hard to tell; we put in gravy enough to saturate the meat.

X Q. 16. Is there a teacupful of gravy in the meat of Exhibit A?

A. It is impossible for me to tell.

X Q. 17. Is there two teacupsful of gravy in the meat of Exhibit A?

A. It is impossible for me to tell.

288 X Q. 18. How much meat is there?

A. Enough to fill the can.

X Q. 19. How much do you suppose the can would hold in liquid measure approximately?

A. About three pints I should think.

X Q. 20. You do not know how much gravy has been used in any particular can of meat put up by the Crystal Lake Works, do you?

A. No, sir; I do not.

X Q. 21. It would be impossible for you to tell, would it not?

A. It would be impossible for me to tell.

X Q. 22. There might not be more than a couple of tablespoonsful if the can was full of meat?

A. Well, I should think there would be more than that.

X Q. 23. How much more would you think every can contained?

A. About six times that amount; that is only a guess at it.

X Q. 24. Do you fill the cans full of meat before you put the gravy in, or do you put the gravy in first and then fill the can with meat?

A. We take and put in a little meat and a little gravy, a little gravy and a little meat, and a little meat and a little gravy, until the can is full. That is just as I told you in the first place.

X Q. 25. What condition is this gravy in when you put it in the can?

A. It is hot.

X Q. 26. Is it very rich gravy?

A. About medium.

X Q. 27. You do not put the meat in tin canisters and then fill the canister quite full with gravy, exactly in the manner described in the article you read in the new American Cyclopedia, do you?

289 A. May be not exactly, but so near that it makes no difference in the process. The last thing we do is to pour all the hot gravy in that we can get into the can.

X Q. 28. Have you had considerable experience in the preparation of meats for preservation?

A. Yes, sir.

X Q. 29. Before you were instructed by Mr. Archdeacon to put up this especial kind of meat, did you ever see meat preserved in such a manner that it could be removed from the can, so that it would stand solid, with no more admixture of gelatine than is in Exhibit A?

A. Yes, sir.

X Q. 30. Where did you see that meat?

A. I saw it at Archdeacon & Russell's, 91 South Water street, Chicago, Illinois.

X Q. 31. At what time?

A. The year before the great fire; that would be 1870.

X Q. 32. What kind of meat was it?

A. It was beef, and also pork, veal, and game.

X Q. 33. By whom was it prepared; do you know?

A. By myself.

X Q. 34. Are any of those cans in existence?

A. No, sir.

X Q. 35. Would not the trade be apt to know something about those cans of meat so put up by you; and, if so, who would be likely to know about it in the general trade?

A. I think not, as they were only experiments, and were burned up during the great fire.

X Q. 37. Is that the only meat you ever saw put up in the solid condition, like Exhibit A, with no more mixture of gelatine than said exhibit contains?

A. No, sir; for I have seen those that I have just told you about, that is, the beef, pork, veal, and game.

290 X Q. 27. I mean besides the meat which you say was burned up in the great fire, and the experiment to which you referred.

A. That is all.

X Q. 38. Did you ever hear of meat being put up in the solid condition of the meat from Complainants' Exhibit A, with no more admixture of gelatine than is contained in said meat, before this experiment?

A. I don't remember.

X Q. 39. After filling the can with meat, and the slight admixture of gravy, you sealed the can hermetically, did you not?

A. No, sir.

X Q. 40. What was the next done?

A. We put into a steam-bath with the hole open.

X Q. 41. That was for the purpose of expanding the contents of the can, and driving off steam, was it not, so as to produce as perfect a vacuum as possible?

A. No; it was for the purpose of driving out the air.

X Q. 42. Was no steam driven out by that heating in the saline bath?

A. I think not.

X Q. 43. What was the temperature of the bath now referred to; is it not the bath you speak of as varying in temperature from 212° to 270°?

A. No, sir.

X Q. 44. What was the temperature of this bath?

A. About 200°.

X Q. 45. After removal from this bath of about 200°, what was the next step?

A. The hole was soldered air-tight.

X Q. 46. Was the can subsequently punctured?

291 A. I do not exactly understand you. The center hole was made when the can was made. It was not subsequently punctured.

X Q. 47. What hole was open in the bath?

A. The hole in the top of the can.

X Q. 48. Do you refer to the smaller hole or the larger hole?

A. I refer to the large.

X Q. 49. Then, after the can was removed from the bath at 200°, the disk was soldered on top of it, I understand you?

A. The cover; yes.

X Q. 50. And with a smaller hole, in the centre of the cover, still open?

A. No, sir; it was soldered up at the same time.

X Q. 51. What was the object of that small hole?

A. It helps the solderer to get the ring tight.

X Q. 52. How did you ascertain the temperature of the bath to be 200°?

A. By a thermometer.

X Q. 53. What kind of an apparatus was it—the bath itself?

A. Steam and water. It was a square tank filled with steam and water—just an open steam-pipe into the water.

X Q. 54. You are sure that the water never boiled?

A. At the bottom it might possibly 212°, and if you will let me, I will take my answer back there and put it 212°, but I know a part of the bath would not be 212°.

X Q. 55. Did you notice any vapor rising from the cans when you removed them from the bath?

A. No, sir.

X Q. 56. It did not steam any, did it?

A. No; no more than the steam off from the water.

X Q. 57. Did your ever see the meat put up by the Wilson Packing Company?

292 A. I did not.

X Q. 58. You never saw a can of it?

A. Yes, sir, I have; not to open.

X Q. 59. You have seen the cans after they were put up?

A. Yes, sir; I have never been inside of their factory.

X Q. 60. When did you first see a can put up by the Wilson Packing Company—do you remember?

A. Shortly after they commenced business.

X Q. 61. When did the Crystal Lake Works commence to put up this meat like Complainants' Exhibit A?

A. The latter part of 1874, or the early part of 1875; I am not sure which.

X Q. 62. Do you remember anything about the circumstances, at the time it commenced?

A. I do not.

X Q. 63. As to why they commenced?

A. I do not.

X Q. 64. Were you present at a dinner party, given in Crystal Lake, at which Mr. Archdeacon was present, and at which a can of the Wilson Packing Company's meat was opened; and at which somebody made the remark that the Crystal Lake Works would go on and put up that meat, and that it was a good thing, or any remarks similar to that?

A. I was present at that dinner party, but do not remember hearing any such remarks made.

X Q. 65. Was Mr. Archdeacon present there?

A. He was out at Crystal Lake, but I do not remember if he was present at the table.

X Q. 66. When was that dinner party given; do you remember?

A. The early part of 1875.

X Q. 67. Was it not before the Crystal Lake Works commenced to put up meat like this Exhibit A, or about the time?

A. I think it was about the time.

WM. H. RAILTON.

293 Exhibit Crystal Lake Co.'s Label.—(See page 22, defendant's record.)

Before opening keep in a cool place.

CORNED BEEF.

[Trade-mark.]

Crystal Lake Pickling and Preserving Works.

Warranted 2 lb.

We recommend it to housekeepers who desire to avoid cooking in the summer.

For sea-going vessels and for army and navy use, it is unrivaled.

We beg to call your attention to our canned game, poultry, ham and eggs, and all kinds of meat, put up in the best manner. Also, to our catsups, sauces, &c., &c., &c.

WIENER WELTAUSTELLUNG HERRN WM. ARCHDEACON IN CHICAGO.

PREIS MEDAILLE.

This valuable article is prepared by a new process, which received the award at Vienne Exposition.

294 Fur "Preserved Meat," zu erkannt.

WIEN, 1873.

Warranted to keep for years in any climate.

OUR CORNED BEEF

Is prepared and packed from the choicest meat, and put up by our

new and scientific process. It retains its natural color and flavor in any climate. We warrant every can.

DIRECTIONS.—For opening the can, follow the red line with the can-opener, then tap it lightly on the small end. Use a sharp knife in slicing.

Wholesale depot: F. A. Waidner, 45 & 47 River St., Chicago.

295 A. D. 1841.] [No. 8874.

Preserving animal and vegetable substances and liquids.

Wertheimer's specifications.

To all to whom these presents shall come, I, John Wertheimer, of West st., Finsbury Circus, in the city of London, printer, send greeting:

Whereas Her present most excellent Majesty Queen Victoria, by her letters patent under the great seal of Great Britain, bearing date at Westminster the eight' day of March in the fourth year of her reign, did for herself, her heirs, and successors, give and grant unto me, the said John Wertheimer, her especial license, full power, sole privilege, and authority that I, the said John Wertheimer, my ex'u'ors, ad*u*m'ors, or assigns, or such others as I, the said John Wertheimer, my ex'u'ors, add*u*m'ors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should, and lawfully might, make, use, exercise and vend, within all her said Majesty's colonies, and plantations abroad, and in the Isles of Man, Jersey, Guernsey, Alderney, and Sark, the invention of "certain improvements in preserving animal and vegetable substances and
296 liquids," communicated to me by a certain foreigner residing abroad, in which said letters patent is contained a proviso that I, the said John Wertheimer, shall cause a particular description of the nature of the said invention, and in what manner the same is to be performed, to be enrolled in her said Majesty's high court of chancery within six calender months next and immediately after the date of the said in part recited letters patent, as in and by the same, reference being thereunto had, will more fully and at large appear:

Now, know ye, that, in compliance with the said proviso, I, the said John Wertheimer, do hereby declare that the nature of the said invention and the manner in which the same is to be performed are fully described and ascertained in and by the following statement thereof, that is to say:

The invention relates to that mode of preserving animal and vegetable substances and liquids where the matter to be preserved is placed in cases from which the atmospheric air is more or less driven off by heat, and thus obtaining a more or less perfect vacuum; and the invention consists of a mode of more readily and certainly obtaining a vacuum, and then closing the opening in the case by soldering,
297 and it is well known that on the extent to which the atmosphere is driven off and subsequently excluded depend the success of the process and the length of time which provisions may be preserved; and, so far as I am informed on the subject, up to the time of granting my said letters patent there did not exist any mode of fully driving off the atmospheric air, and of soldering and positively closing the cases in which provisions were placed; and in order to give the best informa-

tion in my power, I will proceed to explain the invention as practiced by me.

The cases in which the animal or vegetable substances, whether in the solid state or in the form of soups and liquids, are to be placed in cases, and as nearly as possible to fill them, the covers are then to be soldered on, and each of said covers having one or two small holes, the larger of which is to be about the one-eighth of an inch in diameter, the other much less, even as small as the fiftieth of an inch. The cases and covers I prefer to make of sheet-iron or iron tinned, but do not confine myself thereto. The cases thus covered are, with their contents, to be heated by a fire or hot plate or other convenient
298 means to a temper'ture of somewhat more than 212° of Fahrenheit, in order to insure the food being at the boiling point. By this means the steam which is driven off from the liquid which is in the provisions will drive off the atmospheric air through the openings before mentioned; and in order to prevent the atmosphere entering, I apply a ring of heat or flame about the openings, which prevents the air pressing through the openings into the cases, at the same time the steam with air from the inside of the cases can, by the pressure within, be driven out at the openings. In thus applying a ring of flame I prefer *to* gas, though I do not confine myself thereto, and in using gas, I have a ring or loop burner having holes for jets all around the upper surface, and the under surface of the ring is covered with cotton or other soft material, which, being kept damp and pressed against the surface of the case containing provisions, will not allow any air to pass under the burner, and I apply one such ring or hoop burner to each hole in the case, in such a manner that the hole is at or near the center of the burner, and then by pressing the burner on the case, or the
299 case up under the burner, I make the same as air-tight as possible, and ignite the gas: the steam and air from within continue to be forced through the holes, and through the flame, which at the same time, owing to the interior of the flame having little air to supply combustion, will come together and form a hollow dome over the hole below, and thus most perfectly exclude the outer atmospheric air passing down through the flame. It should be stated that the provisions are to be submitted to the process of heat for more or less time, depending on its nature, as heretofore, and according to the extent it is desired the same should be cooked, and the provisions, when meat or vegetables, may be put into the case in their natural state, or they may be first scalded. When the cooking has been carried on to the desired extent, and the operator is satisfied that the atmospheric air which was in the provisions and in the case is fully driven off, which he will judge of by observing that the steam is coming out with considerable force, he will then proceed to solder up the holes, commencing by stop'ing the larger hole and then the smaller one, keeping up the temperature dur-
300 ing this process, in order to ensure the boiling point being maintained within the case, and that the pres'ure within may be such up to the last moment as to ensure the driving off every portion of atmospheric air from within the case, for it is of the utmost consequence that every particle of atmospheric air should be driven off, and I continue the heat for some minutes after the vessel is hermetically closed, when only partially cooking. Having completed the process as above described, I allow the case to cool and stand till the next day, and then light the gas-burner around one of the openings, and unsolder that opening, by which means any air which may have remained on the food, which it is liable to do when only slightly cooked, will pass off

and be consumed; the hole is again soldered, and the process complete. By this mode of ensuring the drawing off of the atmospheric air and of closing the holes air-tight by the aid of the ring-burner, very large cases of meat or vegetable food may be preserved with certainty and for a great length of time. I sometimes, in place of using the burner at the opening through which the air is expelled, operate in the following manner:

301 Having soldered on the cover of the case I apply heat in order to expell the atmospheric air through the small hole or holes left, and having forced the air out as fully as I can by such means, I then solder up the small openings, but not having used the heat or flame at the openings the vacuum will not be sufficient to preserve the provisions fully for a long time, and such process has been before resorted to but without success. *But* this part of the invention, in having first driven off as much air as I can by heat, and having soldered up the small openings, I continue the process of heat from about ten to thirty minutes, according as the case is small or large. A small case, being under ten pounds, will not require over ten minutes. By either of the above modes very large cases can be preserved with certainty, which is not the case with other modes before resorted to. In applying heat to these purposes I prefer to employ a fluid bath in place of applying the dry heat of a hot plate or oven, which are difficult to so to regulate the temperature as to keep all parts equally heated and prevent burning; and I use a solution of muriate of lime or of

302 nitrate of soda, preferring muriate of lime, for by such means I am enabled to obtain a constant temperature of two hundred and seventy to two hundred and eighty of , without material evaporation; and I place such solution in a trough of a depth somewhat less than the vessels or cases containing the provisions; and by putting such cases into such liquid and keeping the liquid heated by steam-pipes or otherwise a constant and equitable temperature may be obtained and no burning can take place. I would remark that I am aware that baths of a similar description have been used for other purposes; I do not therefore claim their use generally, but only when applied to the purpose of heating vessels or cases containing provisions to be preserved by closing them air-tight. Having thus described the invention I would have it understood that I am aware that the driving off air from cases by heat has been done before in preserving vegetable and animal matters in cases, but in such instances it has been thought absolutely necessary to remove the case from heat and allow the contents to cool before soldering up the openings. Now it is

303 peculiar to this process and of the greatest importance that the openings should be closed in opposition to the pressure within the case caused by the heat; by such means the vacuum is ensured. In the former process they could not obtain a vacuum, owing to the cooling done before soldering up the orifice. In performing this invention the heat is continued during the driving off of the air; also when soldering up the opening and for some time after soldering, thus avoiding that process of cooling heretofore considered necessary. But what I claim as the invention is:

First. The mode of employing a burner to exclude the atmosphere and for closing the openings of cases wherein animal and vegitable substances and liquids produced therefrom are to be preserved, as above described.

Secondly. I claim the mode of preserving animal and vegetable matters in closed cases by expelling as much air as I can by means of heat, then closing the opening during the heating process, and con-

tinuing the heat after closing for a time in order to decompose the remaining atmospheric air.

And, thirdly, I claim the application of the final baths as herein described.

304 In witness whereof the said John Wertheimer have hereunto set his hand and seal this eight' day of September, in the year of our Lord one thousand and eight hundred and forty-one.

JOHN [L. S.] WERTHEIMER.

And be it remembered that on the eighth day of September, in the year of our Lord 1841, the aforesaid John Wertheimer came before our said lady the Queen, in her chancery, and acknowledged the specification aforesaid, and all and everything therein contained and specified in form above written; and also the specification aforesaid was stamped according to the tenor of the statute made for that purpose. Inrolled the eight' day of September, in the year of our Lord one thousand eight hundred and forty-one.

305 A. D. 1817.] [No. 4150.

Preservation of animal and vegetable substances.

Granholm's specification.

To all to whom these presents shall come I, Ludwig Granholm, of Foster Lane, in the city of London, captain in the royal navy of Sweden, send greeting:

Whereas his present Majesty King George the Third did, by his letters patent under the great seal of Great Britain bearing date the fifth day in August now last past, give and grant unto me, the said Ludwig Granholm, his especial license that I, the said Ludwig Granholm, my executors, administrators, and assigns, or such others as I or they should agree with, and no others, during the time of years therein expressed should and lawfully might make, use, exercise, and vend within England, Wales, and the town of Berwick-upon-Tweed, and in all His Majesties colonies and plantations abroad, my invention of "a new or improvod method or methods, process or processes, mean or means of preserving such animal or vegetable products or substances
306 separately or mixed together as are fit for the food of man, and for such a length of time as to render them fit for ships and garrison stores;" in which said letters patent is contained a proviso obliging me, the said Ludwig Granholm, by an instrument in writing under my hand and seal, particularly to describe and ascertain the nature of my said invention, and in what manner the same is to be performed, and to cause the same to be enrolled in His Majety's high court chancery, within six calender months next and immediately after the date of said letters patent, as in and by the same, reference being thereto had, will more fully and at large appear: Now, know ye that, in compliance with the said proviso, I, the said Ludwig Granholm, do hereby declare that my said invention is fully and particularly described and set forth in manner and form following (that is to say):

The object of my said invention is effected by cutting off all communication between the atmospheric air and the articles to be preserved by one or other of the following means, viz: By pouring into the vessel in which the species of food that are to be preserved are packed
307 melted and hot fat, or pouring in a strong, hot, animal fluid jelly

in such manner that not only all the interstices between the pieces but the whole interior of the vessel shall be so completely filled as to displace entirely all the atmospheric air; or, secondly, by coating the different pieces with melted suet before they are packed in the vessel in which they are to be preserved, then packing them when cold, and afterwards displacing all the air from the pieces and from the whole interior of the vessel by pouring in cold a saturated aqueous solution of common sea salt or mineral culinary salt, that is to say, a solution of muriate of soda; or, thirdly, when the article is such as to permit it (as for example, butter), by filling the vessel so completely with the article itself as to expel all the air, using due precaution to prevent the access of air afterwards by percolations or otherwise through the substances of the vessel.

The vessels to be employed are adapted to the nature of the article to be preserved, to the manner of preservation, and to the quantity to be contained in the vessels. On these varieties of vessels I shall now give some necessary observations. For quantities
308 not exceeding about fifteen pounds weight, vessels made of tinned iron, either square or cylendrical, or any other convenient form, are found to answer very well. These vessels should have a ring or fillet of tinned iron wire soldered all around their mouth on their outside, and at the distance of from one-quarter to one-half inch below the said mouth, on which ring or fillet the rim of the cover may rest when the cover is put on. To this ring the rim of the cover is to be soldered when the vessel is finally closed. The cover should be so formed that its center should rise a little higher then the top of the rim, that is to say, it should be a little spherical, conical, or pyramidal, according the form of the vessel. This elevation is given to the cover for the purpose of insuring a perfect dislodgement of air from the interior of the vessel by pouring in well-warmed melted fat, or suet, or hot liquid jelly, or saturated solution of muriate of soda, as mentioned above, through a hole in the cover, the air *the air* escaping through a hole in the center of the cover. The opening for introducing the said melted fat, or solution, or liquid jelly may be the same one by which the air escapes
309 when displaced by the fluid. In this case the opening should be about a quarter of an inch in diameter, or another opening for pouring in the fluid may be made in some other part of the cover about an inch in diameter, into which piece of pipe should be soldered airtight on the inside of the cover about an inch long and narrowing a little toward its lower orifice. In this case the hole in the center of the cover for the escape of the air need not be made more than a sixteenth of an inch in diameter. The opening of such a vessel is effected by driving down the ring or fillet by means of a hammer and the side edge of a chisel or a flat bar of any kind, beginning at one end of the wire and so detaching the parts in succession till the whole is separated by breaking the solder jointing. For this reason no more solder should be applied in fastening on the rings or fillets, and afterwards the covers, then is necessary to secure the exclusion of the air. This kind of vessel answers for articles that are to be packed up in their hot state, as hereafter described. Sometimes I construct them in a manner different from that just described. Instead of fitting the rims of the covers to
310 the outside of the vessels, I make the diameter of the rims somewhat less than that of the vessels, and make them to lodge in a groove the bottom of which forms an acute angle with the inside of the mouth of the vessel, filling the space between the rim of the cover and the side of the vessel with any proper luting or cement; when the ves-

sel is to be closed, the said space being left wide enough to allow the introduction of the cement or luting; these vessels are adapted for articles packed up cold, hereafter described. Other materials are earthenware or pottery; glass, and even wood, with proper precautions, may be employed. The means and precautions to be used in preparing the vessels are the following:

First mean: Applying in a hot state all over their outer surface and over the surface of their covers some good varnish or resinous substance.

Second mean: Saturating them as much as the nature of the material of which they are made will permit, and as completely as possible from their inside, with a saturated aqueous solution of common sea-salt, say of muriate of soda.

Third mean: Lining them with a coating of any substance
311 or mixture not deleterious or impervious (as suet or wax or a mixture of these) that can prevent the articles put in them for preservation from coming in actual contact with the vessels or their covers.

Fourth mean: Inclosing the vessel or boxes, leaving a little space between them to be filled up with tallow or wax, or a mixture of these or any other substance or mixture which may answer the purpose of excluding the contact of the atmosphere from their sides and bottoms; their covers to be also coated over with the same.

One or more of these means are employed to prepare and preserve the vessels in a state fit for the duty assigned to them, varying their application according to the nature of the materials of which the vessels are formed; if the said vessels are made of metal or of earthenware, I use the first and third or the third and fourth means. The interior surface of these vessels should be left unglazed. If they are made of glass I employ the fourth mean; if they are made of wood and to contain articles surrounded with a solution of muriate of soda, I use the first and second or the second and fourth, or the third and fourth mean; but first I char the inside of the wooden vessel. When the foresaid vessels of
312 tinned iron are employed, they are previously to be cleaned with hot water, and if boiled in water for an hour or more, the better; when taken out of the water they are to be quickly but carefully wiped and dried, after which, if the articles to be packed in them are not coated over with suet, as more particularly described hereafter, they should be well greased all over their inside; but if the articles are to be so coated over them, the vessel instead of being greased should be lined with a coat of melted wax or tallow, which is best effected by warming the vessel a little and pouring the melted was or tallow into it and then turning it in different directions till the melted substance is brought in contact with the whole of its surface; this may be done a second and third time or oftener when the coating for greater security is to be made thick, as, for example, a quarter of an inch in thickness. The edge must also be well coated; if tinned over before coated, the better.

The articles to be preserved are cooked in any of the usual manners by roasting, boiling, baking or other ways, and when ready and not to be coated, they are to be placed in their hot state in a vessel
313 made of tinned iron, the said vessel being previously heated. If the article is meat in its own soup or fluid jelly, the soup or fluid jelly should be so strong that it will be solid when cold. The vessel being filled nearly to the mouth, the cover is then to be put on and soldered air-tight all round; after which, is to be filled completely through the hole made in the cover fer that purpose. If the articles

are not so dressed as to furnish a jelly, still they are to be packed; hot fluid jelly or melted warm fat is to be added, the cover soldered on, and then the remaining air expelled by pouring in melted and well-warmed suet or hot jelly till the cover itself is filled to the opening in the center with the melted suet or jelly; after it is thus filled it should be allowed to stand for ten or fifteen minutes (in such a situation as to prevent partial chilling) before closing the opening or openings (as the case may be) in the cover, to allow time for the fluid jelly or fat to insinuate itself completely into the pores of the *peices*; if in that time any shrinkage has taken place, the vessel must have this supplied by pouring in a little more fat or hot fluid jelly, after which the opening or openings in the cover are to be closed,
of which more hereafter. When the articles are to be preserved
314 coated over as described hereafter, they may also be packed in
vessels of tinned iron lined with a coating of wax or tallow as described above, but these are packed cold, and inste'd of expelling the air by means of melted suet or hot fluid jelly, in this case a cold saturated solution of muriate of soda is to be employed. The last operation with these vessels is to close the holes in the cover. When the cover is furnished with a pipe, besides the center hole, the former is to be closed with a cork going into it so as leave a part of the pipe empty above the cork; this space above the cork is then to be filled with any good resinous cement, or with wax; after which, a bit of tinned iron is to be soldered over the hole. The hole in the center may be closed by soldering, or the center hole may be a female screw, through which a bit of iron coated with tin and soldered on the outside, and fitted with a short screw of tin or if iron, tinned all over, and when screwed home then covered with solder. When but one hole is in the cover, both for finally filling the vessel and for the escape of air, the edge of this hole
should be worked so as to project upwards a little, just sufficient
315 to hold a well-shaped *cork* in it' place when driven home, the
top of the cork is then to be cut off, some rosin or tallow melted over, *or tallow melted over* the cork, and a small cover of tinned iron is then to be laid over it and fastened with solder, or a male and female screw may be employed for this, as has just been described. N. B.—When the cover has two holes the funnel employed for filling must fit the pipe in the cover pretty well, or be made to fit by winding something around it, this hole with the pipe being lower than the central hole and the cork employed for closing the pipe, or the hole in the center of the cover shoul' be previously saturated in melted tallow or suet, I have already alluded to articles that are to be preserved coated. These coated articles, as already mentioned, may be preserved in the vessels of tinned iron if properly lined with wax or tallow in quantities so small as fifteen or eighteen pounds, but the principal reason for preserving articles coated is for the convenience of having them packed in large vessels containing from eighteen to fifty or one hundred pounds or more weight. Where large quantities packed hot in the manner
before described, the very heat contained by the article
316 themselves would too much overdo the meat and destroy its tex-
ture. To prevent this, the seperate *peices*, from about three to six pounds each, or two or more of them, tied together with prepared strings (of which hereafter), are placed in a mould while hot, and surrounded with melted and well-warmed suet; each mould and its contents is then suffered to cool, and when cold the entire mass of hard suet containing its piece or pieces is taken out of the mould; the coating of suet now serves as a case for the meat which it contains, and any number of the pieces which may be required or convenient may then be placed in

one sound case or vessel made of wood; if this wooden vessel is not to be covered with another, it is prepared for receiving the coated meat by charring the inside, varnishing the outside, and saturating its inside with a solution of muriate of soda, as before directed, or instead of this saturation the inside may be well coated with tallow or even with rosin melted with a little addition of tallow. If this vessel is to be inclosed in another, and surrounded with tallow or rosin, any substance cal-
317 culated to prevent the access of air, in this case its outer surface does not require to be varnished. The strings employed to tie two or more *peices* together and for suspending these and the single pieces in their respective moulds, so as to keep them from touching the moulds while the melted suet is being applied, ought to be first boiled in clean water for an hour or longer, then well dried, and thereafter soaked for some time in hot melted suet. The coating should in no part be less than three-eight's of an inch in thickness; if thicker it is no disadvantage. If the meat has been cooked by boiling in water or in steam, it should be hung up for a few minutes to allow the water to run off, and then well wiped with a clean cloth before it is put in its mould. When the mould is to be removed the string should be previously cut off under the surface of the coating and the little hole thus made should be filled with fat or suet. When the coated *peices* are placed in the vessel the cover or head is then to be secured in its place, after which the vessel must be placed in such a position that one of the corners, if a square vessel, or a part of its chimes, if a cask, shall form the highest point; in this place a hole must be made by a small
318 auger to allow the pouring in of the solution of muriate of soda, and when filled the hole must be closed with a cork previously soaked in melted suet. It should be noticed that even wooden vessels may be made with the interior of their cover rising in the center to allow the displacement of the air when standing on their bottoms, as already described when speaking of the vessels made of tinned iron. I have already mentioned that some articles, as for example butter, admit of being preserved in contact with the vessel that contains them; this is the case if the butter be put into glass vessels. When vessels of pottery are employed they are preferable when, instead of being glazed within, they are impregnated with melted wax or tallow or fully saturated with a solution of muriate of soda; if wooden vessels are employed for this purpose they should first be well varnished on the outside and then saturated within with muriate of soda. If, owing to the form of the vessel or its cover, any empty space is left the air contained therein should be displaced by pouring in as before directed a saturated solution of soda. Butter may also be preserved deposited in the middle
319 of its containing vessel and surrounded completely with the said solution; in this case the vessel may either be one varnished or glazed on the outside and saturated with the said solution within, or a vessel lined with a coating of melted suet, or a mixture as before described may be used. When to be so surrounded the butter is first moulded into a form similar to the vessel, but so much less in all its dimensions as to be kept half an inch from the containing vessel all round and below and above. Below the butter is introduced a false bottom half an inch thick, previously soaked for at least twenty-four hours in the said solution of salt, a false cover prepared in the same manner is placed over the butter, and through notches in this cover four or more *peices* of wood of a length equal to the depth of the vessel are placed descending into similar notches in the false bottom; these *peices* of wood must also be saturated with the salt solution, as the use of the false bot-

toms are merely for preventing the butter from touching the bottom and the cover of the vessel itself; other means (made of wood and well saturated the said solution) which can answer the same purpose
320 may also be used instead of that just described. The cover of the vessel is then to be secured air-tight in its place, and all air to be dislodged from the interior by pouring in a solution of muriate of soda as before described and the *the* hole by which the air escaped is to be securely closed. As it is often desirable on long voyages that vegetables should be had along with the preserved meat, I have to observe that those which I prefer are potatoes and carrots; they should each by themselves, after which they may either be cut into small *peices* and mixed with the meat, which in its dressing produces its own jelly, or they may be put into a vessel alone and then surrounded with melted fat or jelly in such a manner as effectually to dislodge all air from the interior of the vessel, as before directed for preserving meat, taking care to close the vessel properly. In every case, whether the articles to be preserved are flesh, fish, fowles, or vegetables, I have them fully cooked before enclosing them in their containing vessels, nor do I ever put the vessels after the air is completely expelled, and the opening or openings closed, into a water-bath or into a steam-bath or into an oven or
321 apply heat to them in any way of a higher degree then the common temperature to which they may be exposed in usual and common circumstances.

In witness whereof I, the said Ludwig Granholm, have hereunto set my hand and seal the third day of February, in the year of our Lord one thousand eight hundred and eighteen.

L. GRANHOLM. [L. S.]

And be it remembered that on the same third day of February, in the year above mentioned, the aforesaid Ludwig Granholm came before our lord the King in his chancery and acknowledged the specification aforesaid and all and everything therein contained in form above written, and also the specification aforesaid was stamped according to the tenor of the statute in that case made and provided. Inrolled the same third day of February in the year above written.

Ex'd, C. C. W.

(On margin:) J. CAMPBELL.

322 Specifications in pursuance of the conditions of the letters patent filed by the said Jean Wothly in the Great Seal Patent Office on the 14th August, 1855.

To all whom these presents shall come, I, Jean Wothly, of Zoffingen, Switzerland, send greeting:

Whereas Her most excellent Majesty Queen Victoria, by her letters patent, bearing date the twentieth day of February, in the year of our Lord one thousand eight hundred and fifty-five, in the eighteenth year of her reign, did for herself, her heirs, and successors, give and grant unto me, the Wothly, her special license that I, the said Jean Wothly, my executors, administrators, and assigns, should at any time agree with and no others, from time to time, and at all times thereafter, during the term therein expressed, should and lawfully might make, use, exercise, and vend within the United Kingdom of Great Britain and Ireland, the Channel Islands and Isle of Man, an invention for "improvements in the preservation of meat," upon the condition (among others) that
323 I, the said Jean Wothly, by an instrument in writing under my

hand and seal, should, particularly describe and ascertain the nature of said invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said letters patent: Now, know ye that I, the said Jean Wothly, do hereby declare the nature of the said invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement thereof (that is to say):

This invention consists of a peculiar means of preserving meat, for which purpose the meat is cut into convenient pieces, say of ten to twelve pounds weight each, and separated from the bones. These pieces are to have dusted over them a mixture of sugar and salt and are to be allowed to stand for about two days, when they are subjected to pressure to force out all the blood and serous matter, or in place of being pressed them may be moderately cooked before packing. The pieces of meat are then to be packed in casks, and in order to prepare the casks
324 for such purpose they are first lined with melted fat which is allowed to set on the interior surfaces; greased paper is used to cover the pieces of meat, and they are packed in a cask and have melted fat run into the spaces or interstices, and when the fat is to be closed and is to be inserted in another cask somewhat longer so as to leave a vacant space between the inner and outer casks, which space is to be filled with sand or lime or melted fat and then closed.

And in order that my said invention may be most fully understood and re'dily carried into effect, I will proceed to describe more in detale the manner in which I prefer to operate.

The animal is slaughtered, and cut up as soon as possible afterwards so that the blood and serous matter contained by the meat may be expelled as perfectly as possible. The meat is boned and cut into pieces weighing ten or twelve pounds each.

These pieces are well pricked with a skewer of wood or steel and are powdered and rubbed with a mixture of white sugar and common salt well pulverized. These ingredients are employed in the proportion of one lb. of sugar and quarter lb. of salt to fifty lbs. of meat. The
325 meat having been powdered and rubbed, piece by piece, with this mixture is placed in a large tub when it ought to remain ordinarily during forty-eight hours, but when the weather is very hot twenty-four hours will be sufficient. These pieces are then taken out of the tub to be placed in a box or case in which they are to be pressed. The box or case is perforated and lined interiorly with mats and over the mats clean cloths are laid. The meat is to be put into the press piece by piece, and is laid in layers and each layer is separated from the layer above by a mat and cloths, and in this way the press is filled. The meat is to be subjected to a heavy pressur to drive out as much of the blood and serous matter as possible. The pieces of meat when taken out of the press are wiped with care and are then ready for packing.

This packing is best done in casks containing from one to three or four hundredweight each. They should be strongly made and have an opening through the end for inserting the meat. They should be quite clean, and to insure this they may be rinsed with boiling lime-
326 water. The cask is completely lined with soft melted fat, which should be applied when it is on the point of setting, and the pieces are then carefully enveloped in greased paper and laid in the cask so as to form a layer at the bottom, then melted fat is poured over so as to fill every interstice; then another layer is formed in a similar manner, and again melted fat is poured over, and so on until the cask

is entirely filled; and in these operations care must be taken not to leave any void space. When the cask is quite full it is allowed to stand until the fat is hard before closing the opening in the head. The first cask is now placed in a second cask, and the interior is prevented from touching the side of the exterior cask by small pieces of wood attached to the interior of such exterior cask.

In the space between the two casks melted fat is run, or, if pressed, the space may be filled with lime or sand, and when this is done the outer cask is headed and the packing is complete; when the meat is unpacked the fat is separated from the meat by dipping the pieces in hot water.

327 In witness whereof I, the said Jean Wothly, have hereunto set my hand and seal this tenth day of August, in the year of our Lord one thousand eight hundred and fifty-five.

(S'g'd) JOHN WOTHLY, [L. S.]
50 *Rue de Lille.*

Witness:
J. BASSET,
2 *Rue Dunot.*

328 And afterwards, to wit, on the 18th day of July, A. D. 1879, said complainants, by their solicitors, filed in said clerk's office their appeal bond in said-entitled cause; which said bond is in the words and figures following, to wit:

Appeal bond.

Circuit court of the United States for the northern district of Illinois.

THE WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
vs.
WILLIAM B. CLAPP. } In equity.

Know all men by these presents that we, The Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby, as principals, and John A. Wilson and William J. Wilson, as sureties, are held and firmly bound unto William B. Clapp in the penal sum of one thousand dollars, to be paid to the said William B. Clapp, his executors or adminstrators, to which payment, well and truly to be made, the said Wilson Packing Company binds itself and its successors, and the said Arthur A. Libby, Archibald McNeill, and Charles P. Libby, John A. Wilson, and William J. Wilson bind themselves, their heirs, executors, and administrators, jointly, severally, and firmly by these presents.

In witness whereof the said Wilson Packing Company has caused these presents to be signed by its secretary, and its corporate
329 seal to be hereto affixed, and the said Arthur A. Libby, Archibald McNeill, Charles P. Libby, John A. Wilson, and William J. Wilson have hereto set their hands and seals this seventeenth day of July, A. D. 1879.

Whereas the above-bounden Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby have taken an appeal to the Supreme Court of the United States to reverse the decree rendered against them in the above-entitled cause by the circuit court of

the United States for the northern district of Illinois on the fifth day of July, A. D. 1879:

Now, therefore, the condition of this obligation is such that if the above-named Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby shall prosecute their said appeal to effect and without delay, and answer all damages and costs if they fail to make their appeal good, then this obligation to be void; otherwise to remain in full force and virtue.

WILSON PACKING COMPANY,

[SEAL.] By J. A. WILSON, *Secretary.*

ARTHUR A. LIBBY. [SEAL.]
ARCHIBALD McNEILL. [SEAL.]
CHAS. P. LIBBY. [SEAL.]
J. A. WILSON. [SEAL.]
WM. J. WILSON. [SEAL.]

330 The above bond is satisfactory to us.

ELDRIDGE AND TOURTELLOTTE,
Att'ys for W. B. Clapp.

Approved.

H. W. BLODGETT, *Judge.*

(Endorsed:) Filed July 18, 1879. Wm. H. Bradley, cl'k.

331 United States circuit court, northern district of Illinois.

THE WILSON PACKING COMPANY AND ARTHUR A. Libby, Archibald McNeill, and Charles P. Libby
vs.
WILLIAM B. CLAPP. } In equity.

It is hereby stipulated and agreed by the parties to the above-entitled cause that the canned meat exhibits introduced in evidence in the cause may be used upon the hearing in the Supreme Court to the same extent and with the same effect as though they were attached to and made a part of the record filed in said Supreme Court, and in the mean time may remain in the possession of the parties.

ELDRIDGE AND TOURTELOTTE,
Def't's Sol'rs.

MUNDAY AND EVARTS,
Compl'ts' Sol's.

(Endorsed:) Filed Aug. 1, 1879. Wm. H. Bradley, cl'k.

332 NORTHERN DISTRICT OF ILLINOIS, *set:*

I, William H. Bradley, clerk of the circuit court of the United States for the northern district of Illinois, do hereby certify the above and foregoing to be a correct and complete transcript of the record of all the proceedings had in said court in the cause wherein The Wilson Packing Company et al. are the complainants and William B. Clapp is the defendant, as the same appears from the files and records of said court now remaining in my custody and control.

In testimony whereof I have hereunto set my hand and affixed the

seal of said court, at my office, in Chicago, in said district, this 6th day of September, A. D. 1879, and of our Independence the 104th year.

[SEAL.] WM. H. BRADLEY, *Clerk*.

(Indorsement on cover:) No. 252. The Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby, appellants, vs. William B. Clapp. N. Illinois C. C. U. S. Filed 20th September, 1879.

STIPULATION OF COUNSEL AND ADDITION TO RECORD No. 252.

FILED JANUARY 16, 1882.

In the Supreme Court of the United States, of the October term, A. D. 1881.

THE WILSON PACKING COMPANY, ARTHUR A. Libby, Archibald McNeill, & Charles P. Libby, *vs.* WILLIAM B. CLAPP.	No. 252. Supreme Court of the U. States.

Appeal from circuit court for northern district of Illinois.

It is hereby stipulated and agreed that the disclaimers, certified copies of which are hereto attached, marked, respectively, "Disclaimer A" and "Disclaimer B" and made a part hereof, shall be taken and considered as a part of the record in the above-entitled cause, with the same force and effect, and no other, that they would have had if executed and recorded during the pendency of said cause in the circuit court of the United States for the northern district of Illinois and introduced in evidence in said cause in said court.

And it is further stipulated and agreed that this stipulation and the certified copies of said disclaimers hereto attached may be filed in said cause and by proper order made a part of the record therein (the said copies being admitted as competent and sufficient evidence of the contents of the originals) with the force and effect above provided for, and no other.

Chicago, January 3d, 1881.

JNO. N. JEWETT,
Sol'c't'r & of Counsel for Appellants.
ELDREDGE & TOURTELLOTTE,
Sol's & of Counsel for Appellee.

2 DEPARTMENT OF THE INTERIOR.

United States Patent Office to all persons to whom these presents shall come, greeting:

This is to certify that the annexed is a true copy from the files of this office of the disclaimers filed October 18th & 19th, 1880, respectively, in the matter of the reissue letters patent granted William J. Wilson, assignor, by mesne ass't's to the Wilson Packing Company, April 6, 1875, No. 6370, for imp't in processes for preserving and packing cooked meats.

In testimony whereof I, V. D. Stockbridge, Acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed this twenty-eighth day of December, in the year of our Lord one thousand

eight hundred and eighty-one, and of the Independence of the United States the one hundred and sixth.

[SEAL.]

V. D. STOCKBRIDGE,
Acting Commissioner.

3 *Disclaimer A.*

Whereas reissue letters patent of the U. S., No. 6370, were granted on the 6th day of April, 1875, to William J. Wilson, of Chicago, in the State of Illinois, assignor by mesne assignments recorded in the Patent Office of the U. S., on the 29th day of June, 1874, liber E 18, page 99, of transfer of patents, to the Wilson Packing Company, a corporation established under the laws of the State of Illinois, and having its place of business at Chicago, in the county of Cook, in said State;

And whereas the said Wilson Packing Company is now the sole owner of said reissued letters patent;

And whereas Arthur A. Libby, Archibald McNeill, and Charles P. Libby, all of the said Chicago, doing business at Chicago under the firm-name of Libby, McNeill and Libby, have an equitable interest in said patent and a right to practice and use the invention described therein;

And, whereas, the said Wilson Packing Company and the said Libby, McNeill and Libby, have reason to believe that, through inadvertence, accident, or mistake, and with no fraudulent or deceptive intention, the patent claims more than that of which the said William

4 J. Wilson was the original and first inventor, and that thereby the said specification and claims of said reissued letters patent are too broad:

Now, therefore, the said Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby, jointly and severally make the following disclaimer to the specifications and claims of said patent:

Whereas the original patent No. 149276, dated March 31, 1874, contains in the specification "packing cooked meats for transportation in a compressed form while heated with cooking," and also the words "a measured quantity of the cooked meat is then while yet warm with cooking" and in the first claim the words "by compressing the same while heated with cooking," thereby in connection with other words in the specification describing that the meat was to be in a warm or heated state when compressed into an air-tight package, and that the process covered by the claims was one in which warm or heated meat, and not cold meat, was compressed into air-tight packages; and, whereas,

5 in the said reissue heretofore referred to the words "while heated with cooking" are not found and the word "preferably" has been introduced before the words "while yet warm with cooking"; and whereas in the first claim of the said patent the words "while heated with cooking" are not to be found, the claims of said reissue cover more than the invention of the inventor, William J. Wilson, so far as they cover or embrace the compression of the meat into air-tight packages in any other state than a warm or heated state or condition; therefore, the said Wilson Packing Company and the said firm of Libby, McNeill and Libby, composed as aforesaid, disclaim the word "preferably" in said patent before the words "while yet warm with cooking," and also any process described and claimed in said specifications or claims in which meat is described or claimed to be compressed into the packages in any other condition than a warm or heated condition, so that the claims of the said reissue will refer only to a process in which meat is compressed into the packages in a warm or heated condition, and only to a process for packing cooked meats for transportation by com-

6 pressing the same while heated with cooking into air-tight packages so as to preserve the meat in its integrity and retain all its natural juices and nutricious qualities, and so that the claims of said reissue will refer only to a new article of manufacture, cooked meat put up while warm with cooking in its natural state without disintegration or disiccation in hermetically-sealed packages.

This disclaimer is entered to the entire interest of such letters patent.

Signed by the said Wilson Packing Co. on this thirteenth day of October, A. D. 1880, by William J. Wilson, its president.

[L. S.] WILSON PACKING COMPANY,
By WM. J. WILSON, *Pres.*

In presence of—
A. L. WEBB.
JAMES H. VANE.

I, the said Wm. J. Wilson, of Chicago, in the county of Cook and State of Illinois, the inventor of the process and article of merchandise described and claimed in the original patent No. 149276, dated
7 March 31, 1874, and the reissue thereof No. 6370, dated April 6th, 1875, have read, considered, and understand the above disclaimer and concur in the same, and state that the reissue as modified by said disclaimer now covers all that I am entitled to claim as of my invention.

WILLIAM J. WILSON.

In presence of—
A. L. WEBB.
JAMES H. VANE.

We, the within named Arthur A. Libby, Archibald McNeill, and Charles P. Libby, of Chicago, as aforesaid, in constituting the firm of Libby, McNeill and Libby, having an equitable interest in the reissue above referred to, No. 6370, and liable to be affected as to our rights by any disclaimer thereto, have read, considered, and understand the above disclaimer and concur in the same, and request that it may be filed, and consent to be bound thereby to the full extent of the interest which we have in said patent.

ARTHUR A. LIBBY,
ARCHIBALD McNEILL,
CHAS. P. LIBBY.

8 *Constituting the firm of Libby, McNeil, and Libby.*

In presence of—
LUTHER C. YOUNG,
EDWIN N. HICKS,
Witnesses to the signatures of Archibald McNeill & Chas. P. Libby.

G. M. BARRETTS,
EDW. R. BREVOORT,
Witnesses to the signatures of Arthur A. Libby.
Ex'd E. L. L. C. F.

9 *Disclaimer B.*

Whereas reissue letters patent of the U. S. No. 6370, were granted on the 6th day of April, A. D. 1875, to William J. Wilson, of Chicago, Ills., assignor by mesne assignments to the Wilson Packing Company, being a corporation established under the laws of Illinois, having its place of business at Chicago; and

Whereas the said Wilson Packing Company, are the sole owners of said reissued letters patent; and

Whereas Arthur A. Libby, Archibald McNeill, and Charles P. Libby, all of Chicago, and doing business at Chicago under the firm-name of Libby, McNeill & Libby, have an equitable interest in said patent; and

Whereas the Wilson Packing Company and said Libby, McNeill, and Libby have reason to believe that, through inadvertence, accident, or mistake, the specifications and claims of the said reissued patent have, by the use in the descriptive part of the specification of the words: "The meat is first cooked thoroughly at a temperature
10 of 212° Far. so that all the bone and gristle can be removed, and the meat yet retain its natural grain and integrity," been made to include more than that of which the said William J. Wilson is the original or first inventor: namely, to include the cooking of said meat by other means than by boiling the same in water: Now, said Wilson Packing Company, Arthur A. Libby, Archibald McNeill, and Charles P. Libby jointly and severally hereby enter a disclaimer to any interpretation or legal construction to the said words, broader than is conveyed by the words, "the meat is first cooked thoroughly by boiling it in water so that all the bone and gristle can be removed and the meat yet retain its natural grain and integrity."

Said Wilson Packing Company, Arthur A. Libby, Archibald McNeill and Charles P. Libby, also in the same manner enter their disclaimer to any signification or meaning of the claim of said reissue broader than is conveyed by the following language, namely:

"The within described process of packing for transportation,
11 meats cooked by boiling by compressing the same while heated with cooking, into an air-tight package so as to preserve the meat in its integrity and retain the natural juices and nutritious qualities of the same."

"Second. As a new article of manufacture, meat cooked by boiling, put up while heated with cooking so as to form a solid cake in the package in its natural state, without disintegration or desiccation, in hermetically sealed packages, as set forth."

This disclaimer is additional to a previous disclaimer, dated the thirteenth day of October, A. D. 1880. This disclaimer is entered to the extent of the whole interest in said patent.

The said Wilson Packing Company hereby assent to the above disclaimer by William J. Wilson, their president.

Oct. 14th, 1880.

(WILSON PACKING CO., CHICAGO, ILL.)

WILSON PACKING CO.,
By WILLIAM J. WILSON,
President of said Company.

In presence of—
JAMES H. VANE.
JAMES M. JOHNSON.

The said Arthur A. Libby, Archibald McNeill, and Chas. P. Libby, composing the said firm of Libby, McNeill & Libby, have
12 read, and understand the above disclaimer, and enter their consent to the same, and wish to be bound by the same, so far as

their interest, which is an equitable interest in said patent, as above stated, is likely to be affected by the said disclaimer.

Oct. 14th, 1880.

ARTHUR A. LIBBY,
ARCHIBALD McNEILL,
CHAS. P. LIBBY,
Constituting the aforesaid firm of Libby, McNeill & Libby.

In presence of—
LUHER C. YOUNG.
EDWIN A. HICKS.
Witnesses to the signatures of Archibald McNeill & Chas. P. Libby.

EDW. R. BREVOORT.
G. M. BARRETT,
Witnesses to the signature of Arthur A. Libby.

Ex'd M. McK. J. A. W.

(Indorsed :) Supreme Court U. S. 1881. October term. No. 252. The Wilson Packing Company et al., app'l'ts, vs. Wm. B. Clapp. Stipulation of counsel & addition to record. Filed 16th Jan'y, 1882. 24665—D.